No. 14-1186

In the
United States Court of Appeals
for the Federal Circuit

MEMORYLINK CORP., a Wisconsin Corporation,
Plaintiff-Appellant

v.

MOTOROLA SOLUTIONS, INC. and MOTOROLA MOBILITY, INC.,
Defendants-Appellees

On Appeal from the United States District Court
for the Northern District of Illinois, 1:08-cv-03301, Judge John J. Tharp

NON-CONFIDENTIAL BRIEF OF APPELLANT MEMORYLINK CORP.
[Confidential Material Subject to Protective Order Omitted]

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ORAL ARGUMENT REQUESTED

CERTIFICATE OF INTEREST

In accordance with Federal Circuit Rule 47.4, counsel for appellant Memorylink Corporation certifies the following:

1. The full name of every party or amicus represented by me: Memorylink Corporation.

2. The name of the real party in interest (if the party named in the caption is not the real party in interest) represented by me: None.

3. All parent corporations and any publicly held companies that own 10 percent or more of the stock of the party or amicus curiae represented by me: None.

4. The names of all law firms and the partners or associates that have appeared for the party or amicus now represented by me in the trial court or agency or are expected to appear in this court are: Richard N. Kessler, David B. Cupar, Peter T. Berk, and Matthew J. Cavanagh, of McDonald Hopkins LLC. Michael J. Femal represented Memorylink below, but withdrew from the case and will not appear before this Court.

Dated: March 14, 2014

s/ Richard N. Kessler
Richard N. Kessler
Counsel for Memorylink Corp.

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financial or business information, the disclosure of which may cause significant competitive and other harm to the producing party.]

TABLE OF AUTHORITIES

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STATEMENT OF RELATED CASES

No other appeal involving this civil action is or was before this or any other appellate court. There are no other pending cases known to counsel that would directly affect or be directly affected by this Court's decision in the pending appeal.

JURISDICTION STATEMENT

The district court had subject matter jurisdiction over this action under 28 U.S.C. § 1338(a) because the civil action arose under the Patent Act. The district also had subject matter jurisdiction over this action pursuant to 28 U.S.C. § 1331 as the parties are citizens of different states and there is more than $75,000 in controversy. The district court also had jurisdiction over the non-federal claims pursuant to 28 U.S.C. § 1367(a) as those claims are so related to the claims under the Patent Act that they form part of the same case or controversy under Article III of the United States Constitution.

On February 23, 2009, the district court partially granted Motorola's Rule 12(b)(6) motion, dismissing several Memorylink claims, some of which were resurrected (at least in part) by an order on Memorylink's Motion for Reconsideration entered on October 15, 2009. On April 7, 2010, the district court partially granted Motorola's Rule 12(c) motion for judgment on the pleadings, dismissing certain of Memorylink claims. On August 15, 2013, the district court granted Motorola's motion for summary judgment on all remaining claims except for Memorylink's claim for correction of inventorship on the '352 patent (count 1), on which summary judgment was denied.

On December 3, 2013, the district court granted Memorylink's motion for entry of judgment under Rule 54(b). The court expressly determined that there was

no just reason for delay and entered final judgment on counts 2 through 26. Memorylink timely appealed from that judgment and all interlocutory orders merged within that judgment.

This Court has subject matter jurisdiction over this appeal under 28 U.S.C. § 1295 because final judgment has been entered as to the claims on appeal and because the civil action below arose under the Patent Act.

STATEMENT OF THE ISSUES

1. Did the district court err by granting summary judgment to Motorola on Memorylink's count 3 – which sought to invalidate a purported patent assignment as lacking consideration – when Motorola failed to carry its burden to prove consideration existed, and Memorylink offered evidence that no consideration was given or, at a minimum, created a genuine issue of material fact on the consideration question?

2. Did the district court err by dismissing numerous of Memorylink's claims on Motorola's statute of limitations defense at the pleadings stage when the complaint's allegations, if assumed true and viewed in Memorylink's favor, do not conclusively establish that Memorylink knew or should have known of the existence of its claims more than five years before filing suit?

3. Did the district court err by granting summary judgment to Motorola on Memorylink's claim for infringement of the '352 patent when it based that decision on its granting summary judgment and dismissal on both of Memorylink's claims challenging the validity of the patent assignment, when those decisions were in error?

STATEMENT OF THE CASE

Memorylink sued Motorola, Inc. on June 9, 2008, and asserted 19 claims.[1] Memorylink's claims fit into seven categories: (i) correction of inventorship on two patents and two patent applications (counts 1, 5, 13, 14); (ii) invalidation of a purported patent assignment based on fraudulent inducement (count 2); (iii) invalidation of a purported patent assignment based on lack of consideration (count 3); (iv) infringement of the '352 patent (count 4); (v) breach of contract (count 6); (vi) fraud-type claims (counts 8, 9, 18, 20); and (vii) other torts (counts 7, 10, 11, 12, 15, 17, 19).

On February 23, 2009, the district court dismissed under Rule 12(b)(6) all counts except 5 and 6.

On October 15, 2009, the district court reconsidered its dismissal order by reviving certain state law claims (counts 7-12 and 17-20) as they relate to the '938 patent, but leaving them dismissed as they relate to the '352 patent. The court ruled that the claims were barred by the statute of limitations as to the '352 patent because, based on the court's incorrect reading of the complaint, it decided that Memorylink knew or should have known of Motorola's wrongdoing related to the

[1] Due to a clerical error, the 16th count was incorrectly numbered as Count 17. So although the complaint ends with Count 20, there are actually 19 counts in the complaint.

‘352 patent by June 1998. The Court found it was not clear from the complaint when Memorylink knew or should have known about Motorola’s conduct related to the ‘938 patent. The district court also agreed with Memorylink that the district court had erred in dismissing counts 1, 3, and 4 and fully revived those claims. The court upheld its dismissal of the unjust enrichment claim (count 15) and granted leave to Memorylink to add a new count for breach of contract based on the factual allegations underlying the dismissed unjust enrichment claim.

On October 29, 2009, Memorylink added a claim for breach of contract (count 21). Motorola then moved for judgment on the pleadings under Rule 12(c). On December 7, 2009, the district court ruled on Motorola’s motion by granting Memorylink leave to re-plead some of its counts to make clear whether claims identified in Motorola’s 12(c) motion relate to the ‘352 or ‘938 patent.

On December 21, 2009, Memorylink re-pleaded counts 9, 10, and 17-20 verbatim as they appeared in the original complaint. It clarified count 21, and it added counts 22-26, which are counts 9 and 17-20 narrowed to the ‘938 patent.

Motorola again moved for judgment on the pleadings. On April 7, 2010, the court dismissed counts 9, 10, and 17-20 for the same reason it dismissed them in its February 23, 2009 order: untimeliness. The court otherwise denied Motorola’s motion. Discovery proceeded.

On May 3, 2012, based on a change of ownership, Motorola Solutions, Inc. and Motorola Mobility, Inc. substituted for Motorola, Inc.

On August 15, 2013, the court granted summary judgment to Motorola on all remaining claims except for correction of inventorship on the ‘352 patent (count 1). Below is a summary of how the district court disposed of Memorylink’s claims:

Feb. 23, 2009 Order: Counts 2, 7 (re ‘352), 8 (re ‘352), 11 (re ‘352) 12 (re ‘352), and 13-15,

April 7, 2010 Order: Counts 9 (re ‘352), 10, and 17-20.

Aug. 15, 2013 Order: Counts 3, 4, 5, 6, 7 (re ‘938), 8 (re ‘938), 9 (re ‘938), 11 (re ‘938), 12 (re ‘938), and 21-26.

On December 3, 2013, the district court granted Memorylink’s motion for entry of judgment under Rule 54(b). The court expressly determined that there is no just reason for delay and entered final judgment on Counts 2 through 26. Memorylink timely appealed from that judgment and all interlocutory orders merged within that judgment.

I. Facts

A. Conception

Memorylink’s Peter Strandwitz is the originating force behind the wireless video technology claimed by the ‘352 patent, now found on most of today’s smart phones and computer tablets. Although a businessman, Strandwitz is far from being the starchy type. Back in the ‘90’s, Strandwitz was fascinated with new

online video games, which allowed people from all over the world to play together. Contemplating ways of improving the online experience, Strandwitz thought to himself how neat it would be to see video of other players' faces and reactions realtime during the game play. That led Strandwitz to think of other applications of his novel video idea. By June 1997, Strandwitz had envisioned a handheld camera wirelessly transmitting video and still-frame images to another handheld camera or to a monitor. Such a device, Strandwitz thought, would change people's lives. For example, a handicapped grandmother, unable to leave her room, could see up-close video of her petunia garden by having her grandson transmit video of the petunias to her room. (A7264; A8189 ¶5.)

Bob Kniskern, meanwhile, had established himself in the 90's as a video transmission expert due to, among other things, his success in developing the satellite transmission of TV and movies. (A8139-A8140 ¶¶2-4.) Although Strandwitz knew what he wanted to achieve, he lacked the video transmission expertise to make his idea a reality. Aware of Kniskern's reputation, Strandwitz considered him an ideal person with whom to collaborate. Strandwitz contacted Kniskern and his company about the idea of wireless real time video in August

1997, and – excited by the idea – Kniskern agreed to help.[2] (A7287 ¶18; A8140 ¶¶5-8; A8190 ¶¶6-8.)

Strandwitz and Kniskern partnered effectively and before October, 1997 prior to disclosing the details of their idea to Motorola, they had firmly conceived of their invention: a handheld camera device (such as a cell phone or camcorder) that transmits and receives video signals by communicating wirelessly with a base station, utilizing video compression/decompression circuitry and control features to optimize bandwidth usage (the "Invention"). (A7264 ¶2; A8140-A8141 ¶¶9-12; A8190 ¶¶10-12; A8283-A8285.) The key components of the Invention included the use of: (i) a compression/decompression function created and developed by Kniskern and Strandwitz to reduce the size of the transmitted signals, whereby the camera device could compress outgoing signals and decompress incoming signals to reduce the size of the transmitted data; and (ii) certain selections of other parameters being made by the user or the device so as to allow for reduced latency. (A7264 ¶¶1-2; A8140 ¶¶9-12.) The Invention also included the use of basic, existing technology, such as a radio board, radio transceiver (for transmitting and

[2] At the time of their collaboration, Memorylink did not exist. Kniskern was President of Adaptive Micro-Ware, and Strandwitz was CEO of Plexus. (A4450-A4451.) Strandwitz later founded Memorylink, which incorporated as a Wisconsin corporation on January 28, 1998. (A7283 ¶¶10-11.) Strandwitz became the first CEO of Memorylink and Kniskern became a part owner and member of its Board of Directors. (A7283-A7284 ¶12-13.)

receiving wireless signals), camera, microphone, controls, display, antenna, and other off-the-shelf available components. (A7265 ¶4; A8141 ¶¶11, 13-14; A8190 ¶12.) As the video signals were to be sent wirelessly, using a radio board was a "no-brainer." (A8141 ¶14.)

B. Strandwitz And Kniskern Show Motorola Their Invention

[redacted] Strandwitz and Kniskern went to Motorola first, around December 18, 1997, to interview Motorola as a potential radio board supplier. (A7265 ¶6; A8142 ¶¶18-19; A8191 ¶15.) During the meeting, Strandwitz and Kniskern explained their Invention in very general terms, without disclosing any details because they did not have any confidentiality agreements in place, and explained to Motorola that they needed a radio board. (A7266 ¶7; A8142 ¶20; A8191 ¶16.) [redacted]

Kniskern began building the demonstration by installing the circuitry and other components in a child's Tasmanian Devil lunchbox. (A7266 ¶12; A8144 ¶32; A8192 ¶21.) [redacted]

[redacted] Motorola did not assist in the design or construction of the lunchbox device. (A7267 ¶15; A8537; A8143 ¶¶22-23; A8144 ¶29; A8145 ¶37; A8192 ¶26.)

Prior to conducting their demonstration or sharing any specifics about their Invention with Motorola, Kniskern and Strandwitz entered into confidentiality agreements with Motorola, including a December 26, 1997 non-disclosure agreement signed by Kniskern and a January 13, 1998 Memorandum of Understanding ("MOU") signed by Strandwitz.[3] (A7266 ¶13; A8145 ¶35; A8192 ¶¶23-24; A4594-A4596; A8156-A8157.) Kniskern and Strandwitz signed the agreements on behalf of their respective businesses, Plexus and Adaptive Micro-Ware ("Adaptive"), because Memorylink had not yet incorporated. (A7291)

With those agreements in place, on January 20, 1998, Kniskern and Strandwitz demonstrated their Invention to Motorola. (A7267 ¶14; A8145 ¶36; A8192 ¶25; A8780-A8781) Memorylink's presentation was an overwhelming success: the lunchbox camera wirelessly transmitted real time video that was

[3] Interactive Broadcasting, a company with which Strandwitz had been consulting, also signed the MOU.

displayed on both a television set and a computer. (A7267 ¶16; A8145 ¶¶38-39; A8193 ¶27; A8233; A8235-A8236.) Motorola's engineers were impressed and excited by what they had seen, and they immediately wanted to study, test, and know more about the device. (A7267 ¶16; A8145 ¶39.) [redacted]

At the same time he was building the lunchbox, Kniskern began documenting the specifics of the Invention in writing, which ultimately resulted in a comprehensive twenty-one page technological- and diagram-rich document titled "Wireless Multimedia Core Technology Overview for Patent Review" dated February 15, 1998 (the "Overview"). (A7266 ¶9; A8143 ¶25; A8461; A8295; A7359-A7383.) Kniskern created the Overview, with drafting help from others at Adaptive, based entirely on what he and Strandwitz had discussed and designed. (A7266 ¶11; A8144 ¶27; A8295-A8298; A250-A251.) No one from Motorola had any input in the Overview. (A7266 ¶11; A8144 ¶27; A8295-A8298; A250-A251.)

Memorylink sent Motorola the Overview on February 16, 1998, in confidence for Motorola's in-house attorneys to use it to analyze patentability and to draft a patent application for the Invention. The Magistrate Judge, in the court

below, would later rule that an attorney-client relationship between Memorylink and Motorola's in-house attorneys began by at least the time Memorylink sent Motorola the Overview for legal review and analysis: February 16, 1998. (A2829.)

C. The Sharp And Sony Demonstrations

After the success of the lunchbox demonstration and anxious to see more, Motorola wanted Memorylink to conduct a second demonstration. (A7268 ¶18; A8147 ¶¶47, 51; A8194 ¶32.) On February 25, 1998, Kniskern and Strandwitz successfully demonstrated their Invention using two modified Sharp brand video camcorders that wirelessly transmitted real time video to each other. (A7268 ¶19; A8194 ¶¶36-37; A8147 ¶48, 52-53; A7441-A7442.) Memorylink built the cameras by removing the VCR tape drives from the camcorders and replacing them with circuitry and a radio board. (A7268 ¶20; A8147 ¶49.)[4] Motorola was again impressed. (A7268 ¶21; A8148 ¶54.)

Afterwards, Motorola urged Memorylink to repeat their demonstration using Sony brand video camcorders so that they could demonstrate their Invention to Sony. (A7269 ¶22; A8148 ¶55; A8194 ¶38.) Motorola promised Memorylink, through its statements to Strandwitz, that any demonstration to Sony would be done with Memorylink's approval and with Memorylink in attendance. (A7269

[4] The parties dispute how the idea occurred, who bought the camcorder, and how the camcorder demonstration models were built.

¶23; A8148 ¶56; A8194 ¶39.) In May 1998, Memorylink repeated its successful demonstration of their Invention to Motorola using two Sony video camcorders. (A7276 ¶49; A8153 ¶84; A8199 ¶68.) Motorola asked Memorylink to leave the Sony demonstration units with Motorola, and Memorylink agreed. (A7276 ¶50; A8199 ¶69; A8153 ¶8.) In late June 1998, Motorola broke its promises to Memorylink by demonstrating the Invention to Sony Corporation using the Sony video camcorder built by Memorylink without including Memorylink. (A7276 ¶¶51-52; A8199-A8200 ¶¶70-71.) Wyckoff later admitted to Strandwitz that the demonstration to Sony occurred without Memorylink and that Motorola never identified Memorylink as the true source of the modified camcorders. (A7276 ¶52; A8200 ¶71.)

D. Motorola Improperly Takes Ownership Of The Invention

Because Motorola had experienced in-house patent lawyers, Motorola and Memorylink agreed to have Motorola's attorneys prepare and file a patent application for the Invention. (A7269 ¶25; A8148 ¶58; A8195 ¶¶42-43.) Motorola in-house attorney, Hugh C. Dunlop, prepared the application, which he based on the same "Overview" document that Kniskern created. (A7269 ¶¶27-28; A8149 ¶¶60-62; A8195 ¶¶41, 45; A72-A89; A7359-A7383.) Indeed, the figures from Kniskern's Overview are the same as (or substantially similar to) those in the '352 patent. (A7270 ¶27; A7359-A7383; A72-A89.) Motorola's in-house attorneys

jointly represented Motorola, Memorylink, Kniskern, and Strandwitz from at least February 16, 1998. (A7269 ¶26; A2829; A3690-A3691.) Dunlop, a Motorola attorney, incorrectly told his clients – Kniskern and Strandwitz – that two Motorola employees – Gary Schulz and Jan Wyckoff – were co-inventors and had to be included on the patent. Kniskern, Strandwitz, and Memorylink believed and relied upon Dunlop, their counsel, in agreeing to have Schulz and Wyckoff named as co-inventors. (A7270 ¶¶28, 30; A8149 ¶63; A8150-A8151 ¶¶65, 68, 72; A8195-A8196-A8197 ¶¶46, 48, 50 ¶59; A8218-A8219.) In reality, Schulz and Wyckoff were not proper co-inventors because neither had contributed to the conception or significantly to the reduction to practice of the Invention. (A7281 ¶5; A8278-A8289; A8140-A8143; A8145; A8433; A8366-A8367; A7298 ¶40; A7350-A7354.)

Relying upon their counsel Dunlop's advice, on June 11 and 12, 1998, Kniskern and Strandwitz signed a joint assignment (the "Assignment"), prepared by Dunlop, that purported to give Memorylink and Motorola joint ownership of the Invention. (A7272 ¶35; A8151 ¶73; A8197-A8198 ¶57.) Under the Assignment, Kniskern and Strandwitz purportedly assigned their ownership in their Invention jointly to Motorola and Memorylink. In return, Schulz and Wyckoff were to assign their purported ownership to Motorola and Memorylink. (A7272 ¶35; A8151 ¶73; A8197-A8198 ¶57; A4734-A4743.) Kniskern and Strandwitz executed the Assignment because, premised solely upon Dunlop's advice, they mistakenly

believed that Schulz and Wyckoff were properly named as co-inventors and thought they had to share ownership with Schulz and Wyckoff (and ultimately Motorola). (A7275 ¶45; A8152 ¶82; A8198 ¶66.) Had Kniskern and Strandwitz known the truth – that they were the exclusive inventors of their Invention – they would not have signed the Assignment or conveyed a share of their ownership to Motorola. (A7275 ¶45; A8153 ¶83; A8199 ¶67.)

E. The Patents

On June 22, 1998, Motorola's in-house patent attorneys – on behalf of Motorola and Memorylink – filed U.S. Patent Application No. 09/102,457 titled, "Self Contained Wireless Camera Invention, Wireless Camera System and Method" ("the '352 application"), which eventually issued as the '352 patent. The application named Strandwitz, Kniskern, Schulz, and Wyckoff as the "inventors."

Just two days after filing the '352 application, on the same day Motorola showed the Memorylink camcorder invention to Sony and without informing Memorylink, Motorola filed U.S. Patent Application No. 09/103,408 titled, "Self-Contained Camera Invention and Method for Capturing and Communicating Images via a Modem" ("the '938 application"), which matured into the '938 patent. (A7276 ¶53; A8153 ¶¶86, 89; A8202 ¶85; A8203 ¶88; A90-A98.) The '938 patent and its application depict two video camcorders bearing unmistakable similarities to the modified Sharp and Sony camcorders conceived of, developed,

and built by Memorylink and previously used in the Sony and Sharp demonstrations. (A7277 ¶54; A8203 ¶87; A8153 ¶88; A90-A98; A5404.) Motorola falsely named only Schulz and Wyckoff as the purported "inventors," and omitted the true inventors: Strandwitz and Kniskern. (A7277 ¶55; A8142 ¶15; A8153 ¶88; A8190 ¶12; A8203 ¶87; A7623-A7626; A8026-A8029.)

F. Memorylink Discovers Motorola's Wrongdoing

Around November 29, 2007, Memorylink learned, for the first time, from a different (and un-conflicted) patent attorney, Paul Schaafsma, of the existence of the '938 patent and that Schulz and Wyckoff were not proper co-inventors of the '352 patent. (A 7277 ¶56; A8153 ¶90; A8202 ¶84.) Within months of those discoveries, after attempting to reach a resolution with Motorola, Memorylink sued to correct inventorship and obtain other relief.

II. Procedural History

A. February 23, 2009 Dismissal Order (A9-A33)

On February 23, 2009, the district court partially granted Motorola's Rule 12(b)(6) motion to dismiss and dismissed all but two claims: correction of inventorship of the '938 patent (Count 5) and breach of a non-disclosure agreement (Count 6). The court dismissed most of the claims (Counts 2, 3, 7-12, and 17-20) as barred by the five-year statutes of limitations (rejecting Memorylink's argument that the relevant statutes of limitation were tolled based on the attorney-client

relationship between the Memorylink inventors and Motorola's in-house counsel based on its determination that the Complaint pled that the relationship did not begin until such attorneys were appointed, which was after the relevant actions underlying the claims), dismissed correction of inventorship of the '352 patent (Count 1) on the pleadings, by finding the complaint's allegations, "if accepted as true, would preclude recovery," dismissed the correction of inventorship on pending applications for lack of jurisdiction (Counts 13, 14), dismissed the unjust enrichment claim as precluded by Memorylink pleading the existence of contracts (Count 15), and dismissed the claim for infringement of the '352 patent (Count 4) based on the assignment – which it had just ruled could not be challenged by Memorylink – making Motorola a co-owner of the patent.

B. October 15, 2009 Order On Reconsideration (A34-A43)

Memorylink subsequently moved for reconsideration of the dismissal. On October 15, 2009, the district court granted that motion in part reinstating Counts 1, 3, 4, 5 and 6 in total, and Counts 7-12 and 17-20 insofar as they related to the '938 Patent. Memorylink subsequently added certain counts and amended others based on the Court's ruling. Memorylink also replead the dismissed Counts in full to preserve them for appeal. (A839-A842; A1010-A1029.)

C. April 7, 2010 Order on Motion for Judgment on the Pleadings (A44-A45.)

Motorola subsequently moved for judgment on the pleadings. That motion was granted as to the Counts previously dismissed, but replead for preservation on appeal, but denied in all other respects.

D. The Magistrate's Ruling On The Attorney-Client Privilege (A2817-A2838)

Subsequently, during discovery, over which the parties consented to the Magistrate (Magistrate Nan Nolan) having final decision authority, an issue arose relating to the attorney-client relationship between the Memorylink inventors and Motorola's in-house counsel. Reviewing the evidence before her, Magistrate Nolan found that an attorney-client relationship commenced between the Memorylink inventors and Motorola's in-house counsel by at least February 16, 1998, and disagreeing with the district court's finding at the motion to dismiss stage stating: "With all due respect, the district court was mistaken about the allegations" it relied on in finding no attorney-client relationship until June 1998. (A2825; A2829.)

E. The Court Grant's Motorola's Motion For Summary Judgment (A46-A67.)

Subsequently, Motorola moved for summary judgment pursuant to Fed. R. Civ. P. 56. That motion was granted as to all remaining claims except for Memorylink's claim for correction of inventorship on the '352 Patent (Count 1) as

the district court found that there was an issue of fact as to Motorola's defenses to that claim.

F. Memorylink's Rule 54(b) Motion And The Resulting Judgment

Because this was not a decision as to all claims, Memorylink could not take an appeal without additional findings or permission. The district court suggested that Memorylink and Motorola attempt to resolve that issue by agreeing to a judgment that could be appealed. When that process failed, Memorylink moved for a final judgment pursuant to Rule 54(b). The district court granted that motion, over Motorola's objection, on December 3, 2013 (A68-A70), and entered judgment on that date on all remaining counts except Count I. (A71.) Memorylink timely filed its Notice of Appeal on December 27, 2013. (*See* A148.)

SUMMARY OF THE ARGUMENT

I. The District Court Erred By Granting Summary Judgment To Motorola On Memorylink's Count 3

Under Fed. R. Civ. P. 56, the district court must view the evidence in a light most favorable to the non-movant, and it must resolve all doubts and draw all inferences in the non-movant's favor. Granting summary judgment to a party that bears the burden of proof on the adjudicated issue is very rare because such a movant not only must carry its burden of proof, but also must carry that burden *dispositively* (i.e., it must show the non-movant has no evidence to genuinely dispute any of the movant's evidence).

Here, despite agreeing that Motorola bore the burden to show a putative patent assignment was supported by consideration, the district court took the rare step of granting summary judgment to Motorola and upheld the assignment. The court did so by misreading the plain language of the assignment and incorrectly construing conflicting extrinsic evidence against Memorylink – *the non-movant*.

The patent assignment purported to have Motorola's two employees assign their interests in the patent to Memorylink (to share with Motorola) and, in return, Memorylink's Strandwitz and Kniskern assigned their interests in the patent to Motorola (to share with Memorylink). Thus, the bargained-for consideration was a mutual exchange of ownership interests. Strandwitz and Kniskern testified that they only signed the assignment because they believed and trusted legal advice

from Motorola's in-house lawyers (who were jointly representing them and Motorola at the time) that Motorola's employees were co-inventors and, therefore, had an ownership interest to convey to Memorylink.

Opposing summary judgment, Memorylink offered clear and convincing evidence that Motorola's employees were not true co-inventors and should not have been named on the '352 patent. Based on that evidence, Rule 56 required the district court to assume inventorship was incorrect and to assume that Motorola's employees, therefore, conveyed no ownership interest (i.e., consideration) to Memorylink. On that basis alone, the district court should have denied summary judgment to Motorola, and it erred by not doing so.

The district court then compounded its error by construing conflicting extrinsic evidence offered by the parties in Motorola's favor – rather than non-movant Memorylink's favor – to decide that other consideration, such as patent prosecution services by Motorola's in-house lawyers, supported the assignment. Because that conflicting extrinsic evidence on consideration created, at a minimum, a genuine issue of material fact, the court erred by granting summary judgment to Motorola. This Court should reverse and remand.

II. The District Court Erred By Dismissing Counts 2, 7-12, And 17-20 As Barred By The Statute Of Limitations

When deciding a Fed. R. Civ. 12(b)(6) or 12(c) motion, the district court must assume the truth of all factual allegations, construe the complaint in the light

most favorable to the plaintiff, and it must resolve all doubts and draw all inferences in the plaintiff's favor. Because Fed. R. Civ. P. 8 does not require plaintiffs to plead around all conceivable affirmative defenses that defendants may raise, a Rule 12 dismissal on a statute of limitations defense is rarely proper.

Here, the district court decided that, based on its mistaken reading of the complaint, Memorylink knew or should have known that Motorola's employees were not co-inventors by at least June 1998. Based on that incorrect factual determination, the court erred by dismissing many of Memorylink's claims as barred by a five-year statute of limitations.

Construing Memorylink's complaint in Memorylink's favor, as the court was required to do, does not dispositively establish Motorola's statute of limitations defense. On the contrary, the complaint establishes that Motorola's in-house attorneys were representing Memorylink, Strandwitz, and Kniskern and that Strandwitz and Kniskern believed those attorneys' legal advice that Motorola's employees were co-inventors and had to be named on the patent. Under the law, clients are presumed unable to discern bad legal advice from their attorney. Thus, the court erred by imputing Memorylink with knowledge that was contrary to advice that Memorylink received from its attorney and contrary to what Memorylink alleged about its knowledge in the complaint.

While the district court acknowledged that Memorylink could not be imputed with knowledge contrary to legal advice it received while represented by Motorola's in-house lawyers, the court explained that it had read the complaint as alleging the attorney-client relationship formed "subsequent" to June 1998 – the date by which the court believed the wrongdoing should have been discovered. But the court's analysis was based on an incorrect interpretation of a paragraph in the complaint that stated when Strandwitz and Kniskern formally *appointed* Motorola's in-house attorneys as their attorneys of record to prosecute the patent application before the USPTO. That allegation could not be read as precluding Memorylink from establishing that the relationship formed earlier, especially because such relationships almost always are formed before a USPTO power of attorney form is signed.

Moreover, other allegations in the complaint, and reasonable inferences drawn from them, establish that the attorney-client relationship had formed by at least February 1998, when Memorylink alleged it had provided the confidential Overview document to Motorola for legal analysis. In fact, the Magistrate below (sitting with the same authority as an Article III judge by consent) later ruled that the attorney-client relationship formed by at least February and that, in dismissing Memorylink's claims, the "district court was mistaken about the allegations" regarding the timing of an attorney-client relationship. (A2825; A2829.)

Therefore, the district court erred by dismissing counts 2, 7-12, and 17-20 as dispositively barred by the statute of limitations, and this Court should reverse and remand.

III. The District Court Erred By Dismissing Count 4

In Count 4, Memorylink sued Motorola for infringement of the ‘352 patent. The district court granted summary judgment to Motorola on this claim because, by granting summary judgment declaring the assignment to be valid, Motorola was declared a co-owner of the ‘352 patent and, as such, could not be sued for infringement. The district court, however, erred in dismissing, at the pleadings stage, count 2, which sought to invalidate the assignment for fraud, and erred in granting summary judgment on count 3, which sought to invalidate the assignment for lack of consideration. Therefore, summary judgment on the infringement claim should be reversed and the case remanded.

ARGUMENT

I. The District Court Erred By Granting Summary Judgment To Motorola On Count 3

Count 3 of Memorylink's Complaint sought a declaration that the Assignment (A4734-A4743) was invalid for lack of consideration. The district court erred in entering summary judgment in favor of Motorola on this claim.

A. Standard of Review

The Federal Circuit reviews grants of summary judgment under the law of the regional circuit in which the district court sits. *Grober v. Mako Prods., Inc.*, 686 F.3d 1335, 1344 (Fed. Cir. 2012).

The Seventh Circuit shows no deference to a district court's grant of summary judgment and applies *de novo* review. *Schindler v. Seiler*, 474 F.3d 1008, 1010 (7th Cir. 2007).

B. Summary Judgment Standards

Summary judgment is not appropriate unless, after drawing all justifiable inferences in the non-moving party's favor, "the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law." Fed.R.Civ.P. 56(c); *Dynegy Mktg. & Trade v. Multiut Corp.*, 648 F.3d 506, 517 (7th Cir. 2011). When determining whether a genuine issue of material fact exists, the Court must view the evidence in

the light most favorable to the non-movant, and it must resolve all doubts, construe all facts, and draw all reasonable inferences in the non-movant's favor. *Srail v. Village of Lisle, Ill.*, 588 F.3d 940, 948 (7th Cir. 2009).

C. Motorola Was Required To Show That Adequate Consideration Existed For The Assignment And That There Was No Genuine Issue Of Material Fact On That Question – It Did Neither

Memorylink's count 3 sought to invalidate the Assignment based on a lack, want, or insufficiency of consideration. The district court granted summary judgment to Motorola, finding that Motorola had proven adequate consideration, Memorylink had not shown any genuine issue of material fact, and Motorola was entitled to judgment as a matter of law. The district erred in doing so.

1. A Valid Contract Requires Consideration.

Contracts are invalid when there is a want, failure, or insufficiency of consideration. *See, e.g., Mimica v. Area Interstate Trucking, Inc.*, 620 N.E.2d 1328, 1334-35 (Ill. App. Ct. 1993) (declaring patent assignment void for grossly inadequate consideration); *Johnson v. Johnson*, 614 N.E.2d 348, 355 (Ill. App. Ct. 1993) ("if the alleged consideration for a promise has been conferred prior to the promise upon which alleged agreement is based, there is no valid contract."); *O'Neill v. DeLaney*, 415 N.E.2d 1260, 1266 (Ill. App. Ct. 1980) (invalidating contract because consideration was "grossly inadequate"); *TMF Tool Co. v. Siebengartner*, 899 F.2d 584, 587 (7th Cir. 1990) (finding for plaintiff on claim of

rescission where plaintiff was not paid for the sale stating "This amounts to a total failure of consideration . . ."); *General Citrus Int'l, Inc. v. Remien*, No. 04 C 6402, 2009 WL 483855 (N.D. Ill. Feb. 26, 2009) (invalidating an assignment because valid consideration did not exist); *see generally* 3 Williston on Contracts §7:11 (explaining failure of consideration and lack of consideration).

2. There Was No Consideration For The Assignment

The court below agreed with Memorylink that, as the party relying on the Assignment, Motorola had the burden to prove the existence and adequacy of consideration for the Assignment. (A54, *citing Serpe v. Williams*, 776 F. Supp. 1285, 1287-88 (N.D. Ill. 1991).) "Summary judgments in favor of parties who have the burden of proof are rare, and rightly so." *Turner v. Ferguson*, 149 F.3d 821, 824-25 (8th Cir. 1998). That is because, to obtain summary judgment, Motorola had to: (i) meet its burden to prove the existence and adequacy of consideration; and (ii) show Memorylink lacked evidence to present a genuine issue of material fact on that question. *See Fontenot v. Upjohn Co.*, 780 F.2d 1190, 1194 (5th Cir. 1986) ("if the movant bears the burden of proof on an issue . . . he must establish beyond peradventure *all* of the essential elements of the claim or defense to warrant judgment in his favor"). Motorola met neither requisite Rule 56 element, and the district court erred by ruling otherwise.

Consideration is the "bargained for exchange of promises or performances," as intended by the parties at the time of contract. *McInerney v. Charter Golf, Inc.*, 680 N.E.2d 1347, 1350 (Ill. 1997); *see also* E. Allen Farnsworth, Contracts § 2.6 (1999); Restatement (Second) of Contracts § 71(1) ("To constitute consideration, a performance or a return promise must be bargained for."). Consideration flowing between the parties that was not bargained for as part of the contract in question is insufficient, even if the acts or promises would have been sufficient consideration if bargained for. *See Ross v. May Co.*, 880 N.E.2d 210, 214-16 (Ill. App. 2007) (benefits received from employer were not consideration for change in employment agreement because employee did not agree to agreement changes in return for those benefits).

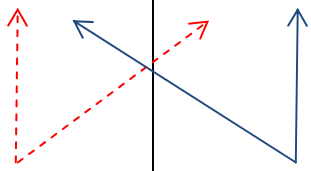
The first step in analyzing consideration is identifying what the parties intended as consideration for the Assignment. *See Hoffman v. Bankers Trust Co.*, 925 F. Supp. 315 (M.D. Pa. 1995) (first deciding that parties intended to exchange $105,000 for set of redeemable bonds as consideration). That question is answered, like all questions of contractual intent, based on the objective manifestations of the parties. *See Laserage Tech. Corp. v. Laserage Labs, Inc.*, 972 F.2d 799, 802 (7th Cir. 1992). "In interpreting a contract under Illinois law, the paramount objective is to give effect to the intent of the parties as expressed by the terms of the agreement." *Id.*

If the contract is unambiguous, contract interpretation is a question of law. *Rizzo v. Pierce & Assocs.*, 351 F.3d 791, 791 (7th Cir. 2003). If, however, the contract is ambiguous, "extrinsic evidence may be considered by the *trier of fact* in determining the intent of the parties." *Richard W. McCarthy Trust dated Sept. 2, 2004 v. Illinois Cas. Co.*, 946 N.E.2d 895, 903 (Ill. App. Ct. 2011) (emphasis added).

i. The Court Erred In Simply Accepting The Assignment's Boilerplate Recitation of Consideration.

Here, the Assignment included a legalistic boilerplate recital identifying the consideration as "the sums of One Dollar to us in hand paid, and other good and valuable consideration." (A4736.) Viewing the Assignment as a whole reveals that the "other" consideration identified in the recital – the truly bargained-for consideration – was each set of purported inventors granting an undivided share of patent ownership to the other's business. Specifically, the Assignment states that Strandwitz and Kniskern (the Memorylink inventors) and Schulz and Wyckoff (Motorola's employees) "assign and transfer" the "entire right, title and interest" to the Invention to Motorola and Memorylink, "jointly and equally." Thus, Motorola's employees purported to convey an undivided share in their ownership to Memorylink (to share with Motorola) and, in return, Strandwitz and Kniskern conveyed an undivided share in their ownership to Motorola (to share with Memorylink). The four individuals' purported ownership derived from their status

as named co-inventors. *See Bd. of Trustees of Leland Stanford Junior Univ. v. Roche Molecular Sys., Inc.*, 131 S. Ct. 2188, 2195 (2011) ("rights in an invention belong to the inventor"). The table below illustrates the flow of consideration intended by the Assignment.

Motorola	Memorylink
	
Wyckoff Schulz	Kniskern Strandwitz

Because the contract is unambiguous as to what was intended as consideration, and because Motorola did not contend otherwise, extrinsic evidence is not admissible to determine what else might have been intended as consideration. As explained below, however, whether the intended consideration existed, failed, or was insufficient is a different question that necessarily requires extrinsic evidence.

The district court ruled that, without extrinsic evidence, it could only conclude that the exchange of patent rights was not the consideration because "there is no such statement in the assignment itself." (A55.) The district court misapplied contract law. A contract need not label consideration as "consideration," and the court cited no case law for that mistaken proposition. Rather, courts read the contract as a whole, taking into account the import of each parties' rights and

obligations, to determine what they intended as consideration. *In re Marriage of Chez*, 1 N.E.3d 1224 (Ill. App. 2013) ("In determining the parties' intent, courts must view the contract as a whole and not focus on isolated terms or provisions."). Here, a plain reading of the instrument confirms that reciprocal assignments were intended as consideration, for that was the entire purpose for the Assignment. That the document was titled an "Assignment" further confirms this legal truth.

It is an unreasonable reading of the document to conclude, as the district court did, that Wyckoff and Schulz assigned valuable patent rights to Motorola to earn a share of the $1 identified in the recital. Restatement (Second) Contracts § 71, n.b ("a mere pretense of bargain does not suffice, as where there is a false recital of consideration or where the purported consideration is merely nominal"); *see also United States v. Jordan*, 186 F.2d 803, 807 (6th Cir. 1951) (disregarding recital in contract of "One Dollar and other valuable considerations" to invalidate contract). This Court should reject the district court's incorrect reading of the instrument. This Court should correctly read the Assignment and declare as a matter of law that the intended consideration was the reciprocal exchange of ownership interests.

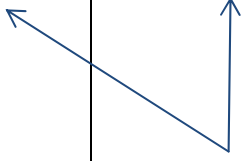
ii. Motorola Cannot Show That The Bargained For Consideration Existed, Was Adequate And Was Given.

Given that the intended consideration for the Assignment was the exchange of ownership interests, in order for Motorola to obtain summary judgment on

Count 3, it had the burden to show that there was no genuine issue of material fact that the purported consideration existed, was adequate and was given.

In the court below, Memorylink offered clear and convincing testimonial and documentary evidence that Schulz and Wyckoff did not contribute to conception and, therefore, were incorrectly named as inventors on the application for the '352 patent. (*E.g.*, A7264 ¶2; A7281 ¶5; A7298 ¶40; A7350-A7354; A8140-A8143; A8145; A8190 ¶¶10-12; A8278-A8289; A8283-A8285; A8366-A8367; A8433.) And Motorola conceded that there were, at least, genuine issues on the inventorship question by not moving for summary judgment on the substance of that claim. Instead, Motorola moved for summary judgment on its laches and equitable estoppel defenses, which the district court denied.

Based on the, at worst for Memorylink, conflicting evidence in the record on inventorship, Rule 56 required the district court to assume that Schulz and Wyckoff were not true inventors and, therefore, had no ownership to convey. *See Poer v. Astrue*, 606 F.3d 433, 438-439 n.5 (7th Cir. 2010) (noting that court must resolve genuine disputes in non-movant's favor at summary judgment stage). Thus, the Court had to assume that Kniskern and Strandwitz received no consideration for granting Motorola a valuable undivided share in the '352 patent. As illustrated below, the consideration only went one way:

Motorola	Memorylink
	
Wyckoff Schulz	Kniskern Strandwitz

Thus, when Memorylink proves at trial that inventorship is incorrect, the Assignment should be voided for want, failure, or insufficiency of consideration. Because the exchange of patent rights was the intended consideration – and because those rights hinge entirely on inventorship – the district court erred by deciding the consideration question before deciding inventorship. This Court should reverse and remand accordingly.

iii. $1 Was Not Proper Consideration

Even if the district court's apparent conclusion that $1 is the intended consideration because it is labeled as such was correct – which it is not – summary judgment still would be inappropriate for at least two reasons. First, as the district court conceded, there is a genuine issue of material fact as to whether that dollar was actually received by Strandwitz and Kniskern. (A55.)

Second, $1 is grossly deficient in comparison to the millions of dollars in value that Motorola received in return. When consideration, despite existing, is

"grossly inadequate" combined with "circumstances of unfairness," the contract is invalid under Illinois law. *Mimica v. Area Interstate Trucking, Inc.*, 620 N.E.2d 1328, 1334-1335 (Ill. App. Ct. 1993) (affirming order invalidating patent assignment); *see also O'Neill v. DeLaney*, 415 N.E.2d 1260, 1262 (Ill. App. Ct. 1980) (affirming order invalidating a contract that purported to sell a painting worth at least $100,000 for $10 and "other good and valuable consideration"). Here, a quarter each to Strandwitz and Kniskern[5] would be grossly disproportionate to what Motorola received under the Assignment and there are genuine issues regarding the impropriety of the influence Motorola asserted over Strandwitz and Kniskern to obtain the Assignment. Thus, summary judgment was improper.

As to consideration, [redacted] By receiving joint ownership of the '352 patent, Motorola received unrestricted rights to incorporate Kniskern and Strandwitz's Invention into Motorola cell phones, including the immensely popular RAZR phones, and to outperform its competition (*e.g.*, LG, Nokia, Blackberry) by offering phones with a superior ability to seamlessly receive and transmit videos wirelessly. (A7627-

[5] Presumably, had the $1 been paid, it would have been split four ways among the four purported assignors.

A7665; 8034 ¶¶8-9.) [redacted] This value grossly and disproportionately exceeds the nominal 25 cent payments to Strandwitz and Kniskern.

Given the large disproportion in consideration, only slight "circumstances of unfairness" are needed to invalidate the contract under applicable Illinois law. *See Mimica*, 620 N.E.2d 1328 at 1335 (Ill. App. Ct. 1993). Here, viewing the evidence in a light most favorable to Memorylink, Memorylink showed unfairness that was much more than slight. Again, because Memorylink has presented genuine issues regarding inventorship, the Court must presume inventorship is incorrect. *See Poer*, 606 F.3d at 438-439 n.5 (court must resolve genuine disputes in non-movant's favor at summary judgment stage). Given that, and considering the immense temptation that Motorola had to obtain Strandwitz's and Kniskern's patent rights, a reasonable fact finder could decide that Motorola took undue advantage by using its in-house lawyers to jointly represent everyone, gain their trust, and then falsely advise that Motorola's employees had to be named on the patent as co-inventors. *Cf. Mass. Eye & Ear Infirmary v. QLT Phototherapeutics, Inc.*, 412 F.3d 215, 233 (1st Cir. 2005) (reversing summary judgment where fact finder could decide that defendant QLT unjustly enriched itself where its attorney,

who also was patent counsel to plaintiff MEEI, "spearheaded the effort to convince MEEI" to change a patent application to include QLT employees as co-inventors, which put QLT in the "uniquely lucrative position" of being able to "commercially exploit" the invention without MEEI).

Moreover, because there was a fiduciary relationship between Motorola and Strandwitz, Kniskern, and Memorylink (*see supra* pp. 13-15, 18), and because Motorola profited from this transaction, there is a presumption that Motorola asserted undue influence. *See Clark v. Clark*, 76 N.E.2d 446, 450 (Ill. 1948) ("When the existence of a fiduciary relationship has been established there exists a rebuttable presumption that any transaction between the parties by which the dominant party has profited, is fraudulent."). Motorola also had superior bargaining power over Kniskern, Strandwitz, and Memorylink, which further contributes to the circumstances of unfairness. (A7275 ¶46; A8198 ¶58.) So even if $1 was the consideration, because Motorola's people are not true inventors, there is grossly disproportionate consideration with elements of unfairness that made summary judgment improper.

iv. The Court Erred In Refusing To Consider Extrinsic Evidence To Determine If The Intended Consideration Existed, Was Lacking Or Was Inadequate.

The district court further erred by ruling that Memorylink's consideration arguments foreclosed the court from considering extrinsic evidence altogether.

Without extrinsic evidence, the court ruled, it could only conclude real consideration was received based on the boilerplate recital saying so.

The court's conclusion sprang from an incorrect reading of Memorylink's brief and a misapplication of law. The court misread pages 16 and 17 of Memorylink's brief as arguing that "the Court should *not* consider parol evidence in deciding whether Strandwitz and Kniskern received consideration in exchange for the assignment of their intellectual property rights." (A54.) Memorylink made no such argument. Instead, Memorylink explained that the court could not consider Motorola's extrinsic evidence to determine what was the "intended consideration" because Motorola "ha[d] not established, let alone argued, that the Assignment was ambiguous."

What was intended as consideration, and whether the intended consideration existed, failed, or was insufficient are two separate questions. While the first question should be answered based on the four-corners of the document (absent an ambiguity), the second question almost always requires extrinsic evidence. For example, in *O'Neill*, even though the contract stated that the painting at issue was sold for "$10 'and other good and valuable consideration,'" the court looked to extrinsic evidence, such as the value of the painting and the parties' actions, to determine if the consideration was adequate or even existed. 415 N.E.2d at 1266-67. Similarly, in *General Citrus*, although the assignment at issue stated it was

made for "$10.00 'and other good and valuable consideration,'" the court nonetheless looked for extrinsic evidence to see (a) if the $10 was paid, or (b) any other consideration was given other than the defendant's pre-existing duty. 2009 WL 483855 at *14. Thus, the district court legally erred by conflating these two separate questions and refusing to consider extrinsic evidence on the second question as a primary basis for dismissing Memorylink's claim.

v. The District Court's Other Bases For Finding Consideration Were Also In Error.

The district court's alternative ground for dismissal, based on consideration of extrinsic evidence, is also built on legal errors and should be reversed.

a. Schulz's And Wyckoff's Transfer of "Whatever Rights They Possessed" Is Not Consideration

The court stated that if it assumes that Wyckoff and Schulz are not true co-inventors, they still gave consideration by conveying "whatever rights they possessed" to Memorylink. Illinois law, however, dictates a different result. Under that law, a contract is invalid when – as here – a party enters into it in reliance on its mistaken belief as to its antecedent rights. *Harbaugh v. Hausman*, 569 N.E. 2d 523, 528 (Ill. App. Ct. 1991). In *Harbaugh*, Rice signed a contract that obligated his estate to convey stocks to Harbaugh at a set price upon Rice's death. The trial court, on a motion for summary judgment, upheld the contract over the objection of Rice's estate. The Illinois Court of Appeals, however, reversed because the

evidence showed Rice may have signed the contract based on his mistaken belief that a prior contract required him to sell the stock to Harbaugh at the contracted price. In reality, the prior contract was invalid for lack of consideration. Holding that a contract is voidable when based on Rice's mistaken belief as to his antecedent rights, the Court ruled that Harbaugh was not entitled to judgment as a matter of law and remanded. *Id.*

Similar to Rice, Kniskern and Strandwitz signed the Assignment based on a mistaken belief as to their antecedent rights. Relying on their attorney's advice, they each believed Motorola's employees were properly named as co-inventors. Like Rice, who believed he had to sell the stocks at the contracted price, Kniskern and Strandwitz believed they would have joint ownership with Motorola (based on its employees' co-inventor status) regardless of whether they signed the Assignment. (A8151, A8197.) Thus, like Rice, Kniskern and Strandwitz never would have signed the Assignment if they knew that: (i) Motorola's employees were not co-inventors; (ii) they, therefore, received no consideration in return for granting ownership rights to Motorola; and (iii) they could have otherwise enjoyed exclusive ownership of the resulting patent. (A8152, A8199.)

Rule 56 required the district court to assume that Schulz and Wyckoff were not true co-inventors, and to assume that Strandwitz and Kniskern truly and fully believed that they were. The district court was required to apply Illinois law –

including *Harbaugh* – to those facts. Despite that law, and despite Memorylink's reliance on *Harbaugh* in briefing, the district court ignored the case. Assuming inventorship is incorrect, as the district court was required to do, the Assignment would be invalid under *Harbaugh* or, at a minimum, there would be a genuine issue whether it was invalid under *Harbaugh*. Accordingly, the district erred by granting summary judgment on this independent basis and this Court should reverse and remand.

b. Strandwitz and Kniskern Were Informed By Their Counsel – Motorola's Hugh Dunlop – That Schulz And Wyckoff Had Inventorship Rights

The district court then further misapplied Rule 56 by construing the underlying factual evidence against Memorylink to conclude that Strandwitz and Kniskern were in a "good position to know whether Schulz and Wyckoff had a colorable claim to be co-inventors of the '352 patent" and that they "apparently believed that Schulz and Wyckoff did have valuable inventorship claims." (A56.)

The facts, when viewed in Memorylink's favor, establish something quite different. The facts of record show that Strandwitz and Kniskern were represented by Motorola's in-house legal department when they executed the Assignment, that they did not know the law of inventorship, that they did not know and were not advised what kind of contribution was needed to be a co-inventor, and that they only signed the Assignment because they relied upon and trusted their lawyers'

advice that Schulz and Wyckoff were co-inventors. (A8148-A8149 ¶¶58-59; A8150 ¶¶65, 68-70; A8150-A8151 ¶¶72-73; A8152 ¶82; A8153 ¶83; A8195 ¶44; A8196 ¶¶48-51; A8197 ¶¶52, 54; A8197-A8198 ¶57; A8199 ¶¶66-67.) Viewing those facts in Memorylink's favor, a fact finder could reasonably conclude that Strandwitz and Kniskern were bargaining for, what they believed were, valid and enforceable interests, rather than questionable or disputed interests (as the district court incorrectly concluded).

Thus, Rule 56 required the district court to assume that Schulz and Wyckoff were not true co-inventors, and that Strandwitz and Kniskern truly and fully (but mistakenly) believed that they were. Because the law required the district court to assume that Strandwitz and Kniskern fully believed their attorneys' advice that Wyckoff and Schulz were co-inventors, the law relied on by the district court (A56-A57) – which involves "quitclaim" deeds and disputed claims—is wholly inapplicable.

For example, in *FDIC v. Lauterbach*, 626 F.2d 1327 (7th Cir. 1980), the court, after finding consideration existed based on the discharge of a pre-existing debt, found that the plaintiff's alternative argument, that the consideration for the notes at issue was actually stock purchased previously. *Id.* at 1338. The court held that the fact that the stock later became worthless was irrelevant as, at the time it had "some value," and therefore there was no lack of consideration. *Id.* at 1339.

Here, resolving the issues of fact in Memorylink's favor, Schulz and Wyckoff's alleged rights had no value at any time since they actually had no rights. Memorylink does not claim that Schulz and Wyckoff's rights later became worthless, but rather that they did not exist.

In *Lindy Lu LLC v. Illinois Cent. R.R. Co.*, 2013 IL App (3d) 120337, 984 N.E.2d 1171 (Ill. App. Ct. 2013), the court found adequate consideration because the purchaser only purchased a quitclaim deed, which, by its terms, the court recognized, only conveys whatever title the grantor has, unlike a warranty deed in which guarantees regarding title are made. *Id.* at ¶¶23-24, 1176. Thus, the purchaser was making a purchase expressly based on a risk. Here, there was no similar purchase of a known risk, Strandwitz and Kniskern believed, based on their counsel's (Motorola's Dunlop) advice that Schulz's and Wyckoff's claims to inventorship were absolutely valid. Strandwitz and Kniskern were not making an agreement based on an uncertain claim[6] The district court's reliance on the

[6] *Apfel v. Prudential-Bache Sec. Inc.*, 81 N.Y.2d 470, 616 N.E.2d 1095 (N.Y. 1993) is not a case stating Illinois law and is distinguishable; in that case, the plaintiff, prior to making the purchase for which it claimed there was no consideration, had full opportunity to fully investigate the system it was purchasing, utilized the system successfully in its business for at least one year, and made payments under the agreement for two years after using the system and seeing it in action. *Id.* at 476, 1097. Here, Strandwitz and Kniskern had no investigation prior to signing the assignment, other than their reliance on Motorola's Dunlop, and did not have reason to investigate or view the inventorship issue after signing the assignment (continued…)

Restatement (Second) of Contracts §74(1) is also unavailing. The Restatement discusses the forebearance or surrender of a doubtful claim. *Id.* Here, viewing the evidence in Memorylink's favor, Strandwitz and Kniskern were not giving up any doubtful claim that they knew of – according to their attorney they had no claim to sole ownership.[7] Whether Schulz and Wyckoff believed that they had a valid claim (A57-A58) is not only disputed (*See* A7281 ¶5; A7298 ¶40; A7350-A7354), but irrelevant as the Restatement speaks to the mindset of the surrendering party – here Memorylink, Strandwitz and Kniskern.

c. Motorola's Other Claimed Consideration Is Not Valid

Below, Motorola claimed that other items – engineering support, lab space, patent prosecution resources, etc. – also constituted valid consideration. This argument, which was accepted in part by the district court, should also be rejected.

First, such a suggestion should be rejected because this would constitute parol evidence of what constituted consideration, and Memorylink offered contrary evidence below regarding what the consideration included. When a contract is

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(until much later when an unconflicted attorney stumbled upon the potential issue) as they relied on their attorney's advice.

[7] Notably, under the Restatement, if the alleged "disputed claim" was known by Motorola (Schulz and Wyckoff) to be invalid, the allegedly "disputed claim" cannot provide consideration. Restatement (Second) of Contracts §74, cmt. B, Illustration 3.

ambiguous and conflicting extrinsic evidence of intent is offered, questions of fact preclude summary judgment. *See Loyola Academy v. S & S Roof Maint., Inc.*, 586 N.E.2d 1211, 1215 (Ill. 1992) ("In cases involving contracts, there is a disputed fact precluding summary judgment when the material writing contains an ambiguity which requires admission of extrinsic evidence."). Both Strandwitz and Kniskern testified that these alleged benefits were *not* offered, accepted, contemplated, or even discussed as the consideration for the Assignment. (A7273-A7274 ¶¶39-40; A8151-A8152 ¶¶75-76; A8198 ¶¶61-62.)

Second, the evidence below did not show that these items were given as consideration. With respect to patent prosecution services, both Strandwitz and Kniskern testified that patent prosecution services were not the intended consideration for the assignment (A8151-A8152 ¶¶75-77; A8198-A8199 ¶¶61-63), but rather that Motorola's handling the prosecution was a convenience because – [redacted] – it was better equipped and experienced to handle it. (A7269 ¶25; A8148-A8149 ¶¶58-59; A8195 ¶¶42-44.) In support of its contrary decision, the district court (A58-A59) relied heavily on a letter from Strandwitz to Motorola's Tom Waltz on January 21, 1998 – four months before the assignment was signed and the patent application was filed, and well before any patent claims were even drafted. However, the district court erred by viewing that specific language, and the entirety of the letter, in Motorola's favor. While Strandwitz

proposes in the letter that Motorola handle the patent prosecution, and also mentions jointly owned patents, Strandwitz does not link the two concepts as an exchange of one for the other. (A4709-A4711) Further, the letter, when viewed in its entirety, evidences that what Strandwitz was proposing, as more fully explained in the draft agreement attached to the letter, was that anything the parties developed jointly would be jointly owned, but that the parties would retain their own intellectual property and license it, as necessary, to the other. (A4711) This letter, viewed in a light most favorable to Memorylink, in conjunction with the evidence propounded by Memorylink regarding consideration creates at least an issue of fact. Given the, at least conflicting, evidence, the district court should not have granted summary judgment. *See Loyola Academy*, 586 N.E.2d at 1215.

With respect to the engineering, business and other support allegedly provided by Motorola, those items were provided under the pre-existing MOU between the parties, and, therefore, was not contemplated or discussed as the consideration for the Assignment. (A7273-A7274 ¶¶40-41.) Indeed, fulfillment of a pre-existing duty cannot be consideration. *E.g., General Citrus*, 2009 WL 483855 at *14.

Thus, because there are genuine issues of fact as to (a) what was the consideration for the assignment, and (b) whether that consideration was given or adequate, summary judgment should have been denied on Count 3 of

Memorylink's Complaint, and the district court's decision in this regard should be reversed.

II. The District Court Erred By Dismissing Several Claims As Untimely

A. Standard of Review

"Because it raises a purely procedural issue, an appeal from an order granting a motion to dismiss for failure to state a claim upon which relief can be granted is reviewed under the applicable law of the regional circuit." *In re Bill of Lading Transmission & Processing Sys. Patent Litigation*, 681 F.3d 1323, 1337 (Fed. Cir. 2012).

The Seventh Circuit shows no deference to a district court that dismisses claims under Rule 12(b)(6) and applies a *de novo* standard. *Senne v. Village of Palatine, Ill.*, 695 F.3d 597, 601 (7th Cir. 2012) (en banc).

B. Standards On A Motion Under Rule 12(b)(6)

When deciding a motion to dismiss under Rule 12(b)(6), the district court must assume the truth of all factual allegations, construe the complaint in the light most favorable to the plaintiff, and draw all reasonable inferences in plaintiff's favor. *Senne*, 695 F.3d at 601.

Federal Rule of Civil Procedure 8(a)(2) "requires only a plausible 'short and plain' statement of the plaintiff's claim" showing that the plaintiff is entitled to relief. *Skinner v. Switzer*, 131 S.Ct. 1289, 1296 (2011).

Dismissal under Rule 12(b)(6) based on a statute of limitations affirmative defense is very unusual. *Xechem, Inc. v. Bristol-Myers Squibb Co.*, 372 F.3d 899, 901 (7th Cir. 2004) (emphasis in original). In reversing such a dismissal, the Seventh Circuit has explained:

> Orders under Rule 12(b)(6) are not appropriate responses to the invocation of defenses, for plaintiffs need not anticipate and attempt to plead around all potential defenses. Complaints need not contain *any* information about defenses and may not be dismissed for that omission.

Id. (emphasis in original). Only a complaint that "admits all the ingredients of an impenetrable defense" may be dismissed on that basis. *Id.*

The district court erred by dismissing counts 2, 7-12, and 17-20 (the "Dismissed Claims") as barred by the five-year statute of limitations because Memorylink's complaint does not admit all of the ingredients of a statute of limitations defense.

C. Memorylink's Claims Were Not Barred Because The Relevant Statutes of Limitations Were Tolled Under The Discovery Rule Because Their Counsel Advised Them That Schulz and Wyckoff Were Proper Inventors

Memorylink based each of the Dismissed Claims on its allegations that it relied on incorrect advice from Motorola's in-house attorneys that Motorola's Schulz and Wyckoff were co-inventors of the Invention and had to be named as such on the patent application. (*E.g.*, A157-A158 ¶¶46-55; A174 ¶¶159-161, A178 ¶199, A180 ¶212; A182 ¶¶228-229; A184 ¶248; A188 ¶¶279-280; A190-A191

¶¶298-300.) Under count 2, for example, Memorylink sought to invalidate the Assignment for fraud and deception based on its allegation that Motorola "intentionally deceived Peter Strandwitz and Robert J. Kniskern into believing that Gary Schulz and Jan-Michael Wyckoff were inventors of the ['352] Patent and needed to be on the Patent for various other reasons." (A174 ¶159.) Strandwitz and Kniskern, as Memorylink alleged, executed the Assignment only because they incorrectly believed that Schulz and Wyckoff were co-inventors. (A174 ¶161.)

The court began its analysis by correctly noting that Illinois law applies the "discovery rule," which "keeps a claim from accruing until the plaintiff knows, or through reasonable diligence should have known of the injury." (A16.) The court then found that Memorylink should have known of its claims in June 1998 because, according to the court's reading of the complaint, it is indisputable that Memorylink should have known by June 1998 that Motorola's engineers were not co-inventors. Because Memorylink sued more than five years after June 1998, the Court dismissed the Dismissed Claims as barred by the statute of limitations.

The court based the dismissal on its finding that it should have been "apparent to the naked eye" in June 1998 that Motorola's engineers were not co-inventors because of "Memorylink's dogged insistence that Motorola's engineers contributed nothing to the patent." (A17-A18.) According to the court, if Motorola

truly contributed nothing, then Memorylink should have known immediately that Motorola's engineers were not co-inventors. (A18.)

1. The Court Misread Memorylink's Complaint To Find No Attorney-Client Relationship Existed At The Relevant Time.

The court's ruling was in error and built on an incorrect reading of the complaint. First, Memorylink never alleged that "Motorola's engineers contributed nothing." (A18.) On the contrary, Memorylink alleged that Motorola provided Memorylink with a "radio circuit board with a standard Ethernet connection" for Memorylink to use in its *demonstration* of the Invention that Strandwitz and Kniskern had previously and independently conceived. (A152 ¶17.) Indeed, later in its opinion, the district court contradicts its reading of the complaint and states, "Memorylink's complaint and the attached exhibits make clear that Motorola contributed in *some way* to the development of the '352 Patent." (A27.) In effect, the district court construed the alleged facts in one way to justify dismissal of claims as untimely, and then construed the allegations in the opposite way to justify dismissal of the inventorship claim. By doing so, the court committed legal error by construing the complaint in *Motorola's* favor, rather than Memorylink's favor.

2. A Correct Reading Of Memorylink's Complaint Reveals That Dismissal Based on Statutes of Limitations Was Improper

Assuming the truth of the allegations, and drawing all inferences in Memorylink's favor, knowledge of Motorola's alleged contributions to the project,

albeit small (e.g., supplying an old off-the-shelf radio board), would not make it "apparent to the naked eye" that Motorola's engineers were not true co-inventors. That is because inventorship is a difficult concept even for trained lawyers to understand, let alone lay persons like Strandwitz and Kniskern. *See Ethicon, Inc. v. U.S. Surgical Corp.*, 937 F. Supp. 1015, 1037 (D. Conn. 1996) ("The boundaries of joint inventorship are unclear even to legal experts."); *Mueller Brass Co. v. Reading Indus., Inc.*, 352 F. Supp. 1357, 1372 (E.D. Pa. 1972) (noting that joint inventorship is "one of the muddiest concepts in the muddy metaphysics of the patent law"); *accord Eli Lilly & Co. v. Aradigm Corp.*, 376 F.3d 1352, 1359 (Fed. Cir. 2004) (the line between inventor and non-inventor can be "a difficult one to draw.").

Furthermore, Memorylink correctly alleged that Motorola's in-house attorneys were jointly representing Memorylink and Motorola with regard to patenting the Invention. (*E.g.*, A154 ¶¶27-28, A156-A157 ¶¶39-48; A158 ¶¶53-55; A160-A161 ¶71; A250-A251.) It is reasonable to infer that the attorney-client relationship began by at least February 16, 1998, the date when Memorylink alleged that it gave information about the Invention to Motorola in confidence for its attorneys to use for evaluating patentability and for writing a patent application. (A154 ¶¶27-28.) Indeed, the Magistrate Judge below later ruled, based on evidence, that the attorney-client relationship began by that date. (A2829.)

Memorylink further alleged that it relied on Motorola's in-house attorneys' inventorship determination in agreeing to have Schulz and Wyckoff named as co-inventors, in signing the Assignment, and in continuing to work with Motorola and sharing Memorylink's innovative wireless video concepts. (*E.g.*, A156-A157 ¶¶44-48; A158 ¶¶53-55; A160-A161 ¶¶69-72; A250-A251.) Under applicable Illinois law, a "client is presumed unable to discern any misapplication of legal expertise." *Goodman, v. Harbor Market, Ltd.*, 663 N.E.2d 13, 18 (Ill. App. Ct. 1995); *Trinity Baptist Church v. GuideOne Elite Ins. Co.*, 654 F. Supp. 2d 1316, 1324 (W.D. Okla. 2009) ("A layman could not reasonably be expected to recognize bad legal advice.")

Indeed, the district court cited no cases – let alone one dismissed at the pleading stage – in which a court found a party knew of its claim despite concurrent, incorrect advice from its attorney. The cases cited by district court only state that the discovery rule tolls claims until the plaintiff knew or reasonably should have known of its claims. *E.g., Horbach v. Kaczmarek*, 288 F.3d 969 (7th Cir. 2002); *Rao v. BP Prods. N. Am. Inc.*, No 04-C6040, 2006 U.S. Dist. LEXIS 95271 (N.D. Ill. Feb 24, 2006); *Bachman v, Bear Stearns & Co.*, 57 F. Supp. 2d 556 (N.D. Ill. 1999). Here, the allegations, viewed in a light most favorable to Memorylink, establish that, based on its attorney's – Motorola's in-house counsel including Dunlop's – advice, Memorylink was unaware of its claims until late-

2007. Moreover, the district court's reliance on cases regarding ignorance of the law (*e.g.*, *Draper v. Pickus*, 2007 U.S. Dist. LEXIS 18200 (N.D. Ill. Mar. 15, 2007), *Goldstandt v. Bear Stearns & Co.*, 522 F.2d 1265 (7th Cir. 1975) (A19)) are inapplicable as here Memorylink, Strandwitz and Kniskern were not ignorant of the law, they received legal advice from a lawyer, who told them, albeit as it turned out falsely, that Schulz and Wyckoff were proper inventors. In such a case, they are presumed not to be able to discern the bad advice, they are not presumed to be merely ignorant of the law. *E.g.*, *Goodman*, 663 N.E.2d at 18; *Trinity Baptist*, 654 F. Supp. 2d at 1324.

Various statements in the dismissal order confirm that the district court did not correctly read Memorylink's complaint as alleging an attorney-client relationship between Memorylink and Motorola's in-house attorneys by at least February 16, 1998. (A18 ("If Memorylink had doubts about the Assignment, they should have either refused to sign it or consulted a lawyer."), (A19) ("Strandwitz and Kniskern decided to rely on their own wits as opposed to consulting a lawyer.").) In its order on Memorylink's motion for reconsideration, the district court clarified that it read the complaint as alleging that the attorney-client relationship formed "subsequent" to Memorylink's Strandwitz and Kniskern signing the Assignment and agreeing to have Schulz and Wyckoff named as co-inventors based on (a) when formally it appointed counsel for purposes of patent

prosecution (rather than when it first entered an attorney-client relationship with Motorola's Dunlop), and (b) a Memorandum of Understanding executed in early 1998 (prior to the establishment of the attorney-client relationship) stating that the Memorandum did not create a fiduciary relationship. (A41.)[8]

As the Magistrate Judge later found, "the district court was mistaken about the allegations" of the complaint regarding the timing of the attorney-client relationship. (A2825.) Its decision to dismiss various of Memorylink's claims (Counts 2, 7-12, and 17-20) on statute of limitations grounds, therefore, should be reversed.

III. Summary Judgment On Count 4 – Infringement of the '352 Patent – Should Be Reversed

In its decision granting Motorola's Motion for Summary Judgment, the district court determined that consideration existed with respect to the Assignment. Based on that finding, combined with the only other challenge to the Assignment –

[8] Indeed, the district court misread the MOU as an "agreement not to enter into any sort of fiduciary relationship." (A41.) The MOU, however, is not so expansive. Rather, the MOU only states that it did not create a fiduciary relationship between the parties. (A223-A225 ¶7.) In any event, "the duties of an attorney to his client go far beyond a common principal/agent relationship". *Morris v. Margulis*, 718 N.E.2d 709, 719 (5th Dist. 1999), *rev'd on other grounds*, 754 N.E.2d 314 (2001). Additionally, an attorney cannot contractually disclaim an attorney-client relationship when providing legal advice. *See* Illinois Rules of Professional Conduct, Rule 1.8(h)(1) & Comment [14] (voiding agreement "that makes the obligations of representation illusory")

fraud – having been dismissed under Rule 12(b)(6), the district court found that Motorola was a joint owner of the '352 Patent. The district, therefore, granted summary judgment to Motorola on Count IV (infringement of the '352 Patent) because "'[i]t is axiomatic that a joint owner of a patent cannot be liable for infringement.'" (A59.)

Because the district court's decisions (a) dismissing Count 2 (fraud invalidating the Assignment) and (b) granting summary judgment on Count 3 (lack of consideration for the Assignment), should be reversed, and Count I (correction of inventorship remains pending) there is at least an issue of fact as to whether Motorola is a proper owner of the '352 Patent at all relevant times. Therefore, Motorola could be liable for infringement, and the district court's grant of summary judgment on Count 4, therefore, should also be reversed.[9]

[9] Even if the Court determines that only one of Count 2 or 3 should be reversed, the grant of judgment to Motorola on Count 4 should still be reversed as each of Count 2 and 3 provide sufficient and independent reasons to find that Motorola is not a proper owner of the '352 Patent.

CONCLUSION AND STATEMENT OF RELIEF SOUGHT

Therefore, as explained above, the district court erred in granting summary judgment to Motorola on Memorylink's claim that the Assignment lacked consideration (Count 3) by viewing the facts in a light most favorable to Motorola, and ignoring Memorylink's evidence creating at least a genuine issue of fact. Likewise, the district court erred by failing to read all the allegations of Memorylink's Complaint as true and in failing to view the facts and reasonable inferences therefrom in Memorylink's favor and, based on that error, granting dismissal of Memorylink's Counts 2, 7-12 and 17-20 based on Motorola's statute of limitations defense. Finally, the district court's grant of summary judgment on Memorylink's claim for infringement of the '352 Patent (Count 4) based on its finding that the Assignment was valid and therefore Motorola was an owner of the '352 Patent, was flawed because the district court's dismissal and grant of summary judgment Memorylink's claims seeking to invalidate the Assignment were in error.

Therefore, Memorylink requests that this Court reverse (a) the grant of summary judgment to Motorola on Count 3 of Memorylink's Complaint, (b) the dismissal of Memorylink's Counts 2, 7-12, and 17-20, and (c) the grant of summary judgment to Motorola on Count 4 of Memorylink's Complaint, remand

this case for further proceedings, and award such other and further relief that the Court deems just and necessary under the circumstances.

Respectfully Submitted,

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Certificate of Service

I hereby certify that on March 14, 2014, I caused to be filed electronically the foregoing with the Clerk of the Court for the United States Court of Appeals for the Federal Circuit by using the appellate CM/ECF system. Participants in the case who are registered CM/ECF users will be served by the appellate CM/ECF system. I further certify that all of the participants in this case are registered CM/ECF users.

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Certificate of Compliance

I certify that pursuant to Fed. R. App. P. 32(a)(7) and Federal Circuit Rule 28(a)(14), the foregoing Brief was prepared in MS Word 2010, is proportionally spaced, has a typeface of 14 points Times New Roman, and contains 11,877 words, excluding those sections identified in Fed. R. App. P. 32(a)(7)(B)(iii) and Federal Circuit Rule 32(b).

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Addendum

Order Form (01/2005)

United States District Court, Northern District of Illinois

Name of Assigned Judge or Magistrate Judge	William J. Hibbler	Sitting Judge if Other than Assigned Judge	
CASE NUMBER	08 C 3301	DATE	2/23/2009
CASE TITLE	MEMORYLINK CORPORATION vs. MOTOROLA, INC.		

DOCKET ENTRY TEXT

Enter Memorandum Opinion and Order. Motorola's Motion to Dismiss (Doc. #21) is GRANTED in part and DENIED in part.

■ [For further detail see separate order(s).]

Docketing to mail notices.

	Courtroom Deputy Initials:	JHC

Add. 1

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IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF IILLINOIS
EASTERN DIVISION

MEMORYLINK CORPORATION,	)	No. 08 C 3301
Plaintiff,	)	The Honorable William J. Hibbler
v.	)	
MOTOROLA, INC.,	)	
Defendant.	)	

MEMORANDUM OPINION AND ORDER

This lawsuit alleges that Motorola defrauded Memorylink out of its intellectual property rights. Motorola denies the allegations and moves to dismiss the complaint pursuant to Federal Rule of Civil Procedure 12(b)(6). For the reasons set forth below, Motorola's motion to dismiss is GRANTED in part and DENIED in part.

I. Factual Background

The following facts are taken from Memorylink's complaint and corresponding exhibits. In 1996, Peter Strandwitz and Robert Kniskern developed technology that enabled the wireless transmission of real time video. (Compl.¶¶ 11, 15, 20) About a year later, Strandwitz approached Motorola to explore the possibility of entering into a business relationship. (Compl. ¶¶ 11-17) Strandwitz believed that combining his video compression technology with Motorola's radio transmission technology would result in a lucrative business partnership; Motorola agreed. (Compl. ¶ 13) On January 13, 1998, the

parties signed a Memorandum of Understanding outlining the terms of their relationship. (Compl. Ex. 3) The MOU stated that the parties would combine their technologies to develop a preliminary specification, and the resulting model would be "jointly owned." (Compl. Ex. 3) Additionally, the MOU stated that each party was an independent contractor "in all aspects" and there was no fiduciary relationship between the parties. (Compl. Ex. 3) After signing the agreement, Strandwitz and Kniskern incorporated Memorylink; Strandwitz was the CEO and Kniskern was a director. (Compl. ¶ 24)

In February 1998, Memorylink—in "anticipation of filing one or more patent applications"—drafted a document entitled the "Wireless Multimedia Core Technology Overview" that described the goals of the parties regarding their working relationship. (Compl. Ex 4) The Technology Overview stated that a unique market opportunity existed because of "the creation by Motorola, Inc., of the first commercially viable integrated circuitry to provide high speed, digitally formatted data transmission … and the creation by Memorylink Corp., of a highly integrated, multimedia processor and communication control circuit utilizing a proprietary audio/video data transfer format." (Compl. Ex. 4)

Over the next few months, Memorylink demonstrated several applications of its new technology. (Compl. ¶¶ 29-32) For example, on February 25, 1998, Memorylink modified two Sharp video camcorders so that camera A wirelessly transmitted real-time video footage that was displayed by camera B. (Compl. ¶ 30) Memorylink accomplished this by equipping the camcorders with its video compression technology, which allowed the camcorders to use Motorola's radio technology to transmit the images. (Compl. ¶ 31) According to Memorylink, Motorola was "blown away" and "astonished" by the

demonstrations. (Compl. ¶ 32) When the demonstration concluded, Motorola asked Memorylink to leave the modified camcorders with Motorola's engineers; Memorylink complied. (Compl. ¶ 33) The demonstration convinced Motorola that synergies existed between Motorola and Memorylink, and the parties decided to work on a patent application. (Compl. ¶¶ 32, 39)

Strandwitz and Kniskern had very little patent experience, so when Motorola suggested that its legal department should handle the patent application, Memorylink readily agreed. (Compl. ¶ 39) On April 13, 1998, Hugh Dunlop, a Motorola senior patent manger, sent a letter to Strandwitz stating that Motorola had reviewed the Technology Overview in order to identify a "basis for patent applications that might be filed as a result of the design effort between Motorola and Memorylink." (Compl. Ex. 5) Dunlop suggested the parties file a "joint patent application" and included a Patent Filing Agreement for Memorylink to review. (Compl. Ex. 5) Dunlop also stated that it was his understanding that Memorylink worked with Gary Schulz and Jan Wyckoff—two Motorola engineers—to develop the invention underlying the prospective patent:

> It is my understanding from Gary Schulz and Jan Wyckoff that the inventors for these ideas are yourself, Gary, Jan, and Bob Kniskern. Please let me know if you or Bob disagree with this determination of inventership.

(Compl. Ex. 5) Memorylink did not object to Dunlop's characterization of the inventorship. (Memorylink Resp. Br. at 7).

On April 21, 1998, the parties met to discuss potential patent applications. (Compl. ¶ 62) At the meeting, Strandwitz and Kniskern signed an invention disclosure form listing themselves, Schulz and Wyckoff as joint inventors of the soon-to-be patented invention. (Compl. ¶ 63) In June 1998, Kniskern and Strandwitz executed an

Assignment to transfer their rights in the prospective invention and any resulting patents to Memorylink. (Compl. ¶ 69) Wyckoff and Schulz executed the same document, thus transferring their rights in the prospective invention and resulting patents to Motorola. (Compl. ¶ 69) The Assignment provided that Memorylink and Motorola would hold "jointly and equally, the entire right, title and interest in" any resulting patents. On June 22, 1998, Motorola's in-house lawyers finished their preparation of the patent application and filed it with the United States Patent Office as U.S. Patent Application Serial No. 09/102,457 titled "Self Contained Wireless Camera Invention, Wireless Camera System and Method." (Compl. Ex. 9) The application was granted on February 18, 2003, as U.S. Patent No. 6, 522,352. (Compl. Ex. 1) (the '352 Patent).

Two days after Motorola filed the '352 Patent application, it filed a second patent application titled "Self-Contained Camera Invention and Method for Capturing and Communicating Images via am Modem." (Compl. ¶ 80) Motorola listed Schulz and Wyckoff as the inventors on the application, but there was no mention of Strandwitz or Kniskern. (Compl. ¶ 81) Memorylink alleges that the application depicts two video camcorders that bear "unmistakable similarities" to the modified video camcorders Memorylink developed to demonstrate its technology. Moreover, because Memorylink left the modified camcorders with Motorola, Memorylink contends that Motorola had ample time and opportunity to "steal" the invention. (Compl. ¶¶ 83-84) Motorola's application was granted on June 3, 2003, as U.S. Patent No. 6, 573, 938. (Compl. Ex. 2) (the '938 Patent). Memorylink contends it was unaware of this patent filing until November 29, 2007. (Compl. ¶ 85)

In light of these facts, Memorylink alleges that Motorola fraudulently induced it to: (1) name Motorola's engineers as co-inventors of the '352 Patent; and (2) give Motorola joint ownership of the '352 Patent. In Memorylink's own words:

> Motorola made false statements and/or omissions of material fact concerning the explanation of the inventorship, the Assignment and the legal effects of joint ownership of the patent right. If an explanation of inventorship, assignment and joint ownership was made to Strandwitz and Kniskern, they would not have assigned any of their rights in the Invention to Motorola, and they would have objected to the addition of the Motorola's employees being added as co-inventors on the patent application.

(Compl. ¶ 66) Memorylink further alleges that "no one from Motorola at any time advised Strandwitz and Kniskern as to the legal significance of their signatures on the Assignment—namely that they were giving away a significant portion of their patent rights to Motorola for free." (Compl. ¶ 71) Memorylink claims the fraud was particularly egregious because Motorola made no significant contributions to the development of the Invention.

Finally, Memorylink claims that Motorola—without Memorylink's knowledge or consent—used the modified camcorders from Memorylink's demonstrations in order to "secretly" file a second patent (the '938 Patent), which did not list Memorylink as an inventor:

> Motorola knew that the application for the Secret Patent would be unpublished meaning that it was not publicly available, until after the Secret Patent issued, thus making it less likely that Memorylink would discover the Secret Patent or Motorola's overall scheme to steal Memorylink's technology or intellectual property rights.

(Compl. ¶ 83) Thus, Memorylink claims it was cheated out of the opportunity to file its own version of the '938 Patent.

II. Standard of Review

Rule 12(b)(6) permits a defendant to challenge the sufficiency of the plaintiff's complaint; specifically, whether the complaint states a claim upon which relief can be granted. Fed. R. Civ. P. 12(b)(6). In evaluating a motion to dismiss under Rule 12(b)(6), the Court must accept all well-pleaded allegations in the complaint as true, and draw all reasonable inferences in favor of plaintiff. *Pisciotta v. Old Nat'l Bancorp*, 499 F.3d 629, 633 (7th Cir. 2007) (internal citation omitted). To defeat a Rule 12(b)(6) motion, "the complaint need only contain a short and plain statement of the claim showing that the pleader is entitled to relief." *EEOC v. Concentra Health Servs., Inc.*, 496 F.3d 773, 776 (7th Cir. 2007) (quoting Fed. R. Civ. P. 8(a)(2)). Although particularized "fact pleading" is unnecessary, the allegations in the complaint must provide enough information for the defendant to have "fair notice" of the claim and the "grounds upon which it rests." *Bell Atl. Corp. v. Twombley*, 550 U.S. 544, 127 S. Ct. 1955, 1964, 167 L. Ed. 2d 929 (2007). Finally, the allegations in the complaint must suggest a right to relief that rises above the speculative level. *Id.* at 555.

III. Analysis

Memorylink's complaint contains 19 counts, which can be divided into four main categories: (1) Fraud; (2) Tort; (3) Intellectual Property; and (4) Contract.

A. *The Fraud Claims are Untimely*

The essence of this lawsuit is that Motorola fraudulently induced Memorylink to give up its intellectual property rights. In Illinois, the statute of limitations for fraud claims is five years. 735 ILCS 5/13-205; *Horbarch v. Kaczmarek*, 288 F.3d 969, 977 (7th Cir. 2002). The statute begins to run when the "wrong was committed, or the time when the fraud was discovered or could have been discovered through due diligence."

Rao v. BP Prods. N. Am., Inc., No. 04-C6040, 2006 U.S. Dist. LEXIS 95271, at *25 (N.D. Ill. Feb. 24, 2006). Memorylink's fraud claims regarding the '352 Patent arise out of two events: (1) Memorylink naming Motorola's engineers as co-inventors on the patent application; and (2) Memorylink executing an Assignment that granted Motorola joint ownership of the patent. Both of these events occurred in June 1998. Therefore, Memorylink should have brought its fraud claims no later than June 2003. Memorylink, however, waited to sue Motorola until June 9, 2008. Nevertheless, Memorylink argues its claims are timely because it did not discover the fraud until 2007.

In April 1998, Strandwitz received a letter from a Motorola patent manager (Hugh Dunlop) stating, "It is my understanding … that the inventors for these ideas are yourself, Gary, Jan, and Bob Kniskern." (Compl. Ex. 5) Memorylink stayed silent, and two months later, Motorola drafted a patent application that listed the two Motorola engineers as co-inventors. (Memorylink Resp. Br. at 7). The letter from Dunlop was the perfect opportunity for Memorylink to express the claims it now advances, *i.e.*, Motorola's engineers were non-contributors and should not be listed as co-inventors of the Patent. Memorylink, however, claims it did not object to the patent application because its agents had no legal background, and it failed to grasp the significance of the term "co-inventor." Thus, Memorylink claims it had no idea that Motorola's request to list two *non-contributing* engineers as co-inventors may have been rooted in fraud.

Memorylink makes a similar claim regarding its decision to sign the Assignment. Memorylink contends that because it was unaware of its legal rights, it had no idea that the Assignment would grant Motorola joint ownership in the patent. Memorylink asserts that once it had a better understanding of the law, it realized the Assignment was a

fraudulent attempt to gain ownership of the Patent. Therefore, Memorylink argues that its complaint is timely because the statute of limitations should not start running until it knew enough law to realize that Motorola was engaged in fraud.

Memorylink is correct in claiming that courts sometimes toll the statute of limitations until a plaintiff learns he has been the victim of fraud. But, where the purported fraud is apparent to the naked eye or discoverable through reasonable diligence, the plaintiff is bound by the normal five-year statute of limitations. For example, in *Rao*, a gas station owner sued employees of BP Amoco for fraud. *Rao*, 2006 U.S. Dist. LEXIS 95271, at *3. Rao alleged that the defendants pressured him into performing personal favors by threatening to increase his rent or terminate his lease. *Id.* at *26. The defendants, however, asserted that the fraud claims were untimely because Rao waited more than five years to bring suit. *Id.* at * 24. In response Rao argued that his complaint was timely because he did not learn of the fraud until more than five years had elapsed. *Id.* at 25-26.

The court began its analysis by noting that Illinois has a "discovery rule," which "keeps a claim from accruing until the plaintiff knows, or through reasonable diligence, should have known of the injury." *Id.* at 26. But, the discovery rule did not excuse Rao's lateness. The court reasoned that if Rao had exerted a little effort, he would have discovered his fraud claims much earlier:

> If Rao had acted with reasonable diligence, he would have become aware of the alleged fraud immediately. Rao claims he was told, for example, that BP could increase his rent and terminate his lease at any time it wished. Rao could easily have ascertained whether these assertions were true by consulting the relevant documents or seeking legal advice.

Id. at 28. Thus, the court dismissed Rao's fraud claims as untimely.

The Seventh Circuit analyzed a similar argument in *Horbach v. Kaczmarek*, 288 F.3d 969, 971 (7th Cir. 2002). In *Horbach*, the plaintiff ordered a tire pyrolysis system from the defendants. An agent for the plaintiff visited the defendant's warehouse after the manufacturing was supposed to be completed. Instead of seeing a finished product, however, the agent saw parts and equipment scattered around the floor. *Id.* at 5. More than five years later, the plaintiff sued for fraud, and the defendant moved to dismiss on the grounds that the suit was untimely. The plaintiff countered by arguing that the statute of limitations should be tolled because he did not learn of the fraud right away. *Id.* at 11. Specifically, the plaintiff asserted that, "the pyrolysis equipment was highly complex and that the [plaintiff] lacked technical knowledge and skill to asses the quality of that equipment himself." *Id.*

The Seventh Circuit rejected the plaintiff's argument because the discovery rule does not toll the statute of limitations where the fraud is discoverable through ordinary diligence:

> Although Horbach makes much of the complexity of the pyrolysis system, his own lack of expertise, and the need for testing ... the complaint makes clear that the [defendant's] purported fraud was readily apparent to the naked, non-expert eye. When [the plaintiff's agent] visited the Portland facility, he found no pyrolysis system at all, but only scattered components ... thus the complexity of the machinery did nothing to cloak [the defendant's] purported fraud.

Id. at 22. Accordingly, the court upheld the district court's dismissal of the plaintiff's fraud claims.

Here, as in *Horbach* and *Rao*, the discovery rule cannot revive Memorylink's claims. Memorylink says it was duped into believing that Motorola's engineers were required to be named as co-inventors. Moreover, Memorylink claims it had no idea that Motorola's demands may have been fraudulent. The notion that Memorylink had no

suspicions of fraud seem highly suspect given Memorylink's dogged insistence that Motorola's engineers contributed nothing to the patent. In this case, Motorola's purported fraud would be relatively easy to unearth. An individual does not need a law degree to understand that those who contribute nothing to an invention are not "required" to be listed as "co-inventors." Indeed, the United States Patent and Trademark Office's website unambiguously states: "According to the law, *only the inventor* may apply for a patent ... If two or more persons make an invention jointly, they apply for a patent as joint inventors. A person who makes only a financial contribution is not a joint inventor and cannot be joined in the application as an inventor." United States Patent and Trademark Office, http://www.uspto.gov/web/offices/pac/doc/general/index.html#patent (last accessed Feb. 20, 2009). These concepts are not difficult to understand.

The same logic can be applied to the issues regarding the Assignment. Memorylink contends that Strandwitz and Kniskern were unaware that they were giving up some of their ownership rights when they signed the Assignment. The Court is hard pressed to understand how this can be true given that the Assignment is relatively clear. Specifically, the Assignment states the parties, "hereby also sell, assign and transfer unto the said Motorola, Inc., and Memorylink Corp., *jointly and equally, the entire right, title and interest in and to said invention* ..." (Compl. Ex. 8) (emphasis added). Motorola's name is not buried in the fine print, nor is the language difficult to understand. If Memorylink had doubts about the Assignment, they should have either refused to sign it or consulted a lawyer.

Memorylink claims Motorola contributed nothing to the Invention. If this is true, then Memorylink should have been aware of the potential fraud because the Assignment

clearly states that it will grant joint ownership of the Invention to Motorola. Where the purported fraud is readily apparent to the naked eye—in this case, executing a document that plainly states the signer is giving away certain rights—the Court will not toll the statute of limitations due to the plaintiff's ignorance of the law. *See, e.g., Draper v. Pickus*, No. 04-C8150, 2007 U.S. DIST LEXIS 18200, at *18-19 (N.D. Ill. Mar. 15, 2007) (noting that the court will not toll the statute of limitations where a plaintiff "had some evidence of an injury more than five years before bringing suit, and a reasonable person in the plaintiff's position would have inquired into the possibility that the defendants had engaged in actionable conduct ..."); *Goldstandt v. Bear Stearns & Co.*, 522 F.2d 1265, 1269 (7th Cir. 1975) (dismissing a complaint as untimely despite the plaintiff's ignorance of the law because, "it is well established that a plaintiff may not merely rely upon his own unawareness of the facts or law to toll the statute.").

Strandwitz and Kniskern decided to rely on their own wits as opposed to consulting a lawyer. More than five years after the fact, they realized this may have been a mistake. Memorylink asks rhetorically why it would agree to such one-sided terms unless there was an element of fraud involved. The Court is unsure, but every poor business decision is not the result of fraud. Perhaps Memorylink acquiesced to Motorola's demands not because they were unaware of potential fraud, but because they wanted to keep Motorola—with all its financial resources, laboratory space and distribution partners—happy. In any event, the counts of the complaint sounding in fraud and arising out of Motorola's conduct regarding the '352 Patent and the Assignment (Counts II, III, VIII, IX, XII XVIII, and XX) are dismissed as untimely.[123]

[1] Count III claims that the Assignment is void for lack of consideration, in other words, Memorylink was duped into executing the Assignment and got nothing in return. Memorylink alleges that Count III is a

B. *The Negligent Misrepresentation Claim is Untimely*

In Illinois, the statute of limitations for negligent misrepresentation is five years. *Brown v. New York Life Ins. Co.*, No. 06-C3339, 2008 U.S. Dist. LEXIS 2942, at *6 (N.D. Ill. Jan. 15, 2008). The statute begins running when the plaintiff knew or reasonably should have known of his cause of action. *Bachman v. Bear, Stearns & Co*, 57 F. Supp. 2d 556, 559 (N.D. Ill. 1999). Once again, because Memorylink was aware of the facts necessary to bring its claim and the alleged misrepresentation—the claim that non-contributing engineers *must* be listed as co-inventors—was not actively concealed, the Court will not toll the statute of limitations. *See, e.g., Entertainment, Inc., v. City of Northlake*, No. 03-C-692, 2003 U.S. Dist. LEXIS 23285, at *17 (N.D. Ill. Dec. 29, 2003) ("Yet where, as here, plaintiffs were aware of the facts necessary to make a claim, a lack of comprehension of the legal significance of those facts—or perhaps more aptly, a lack

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breach of contract claim, and thus, is subject to the 10-year statute of limitations. The Court, however, finds that Count III is simply a different version of Memorylink's common law fraud claim, and thus, is governed by the five-year statue of limitation. *See, e.g., Pavlik v. Kornhaber*, 326 Ill. App. 3d 731, 747-48, 761 N.E.2d 175, 189 (2001) (finding that the applicable statute of limitations is determined by the nature of alleged injury, not the title of plaintiff's claim.); *Armstrong v. Guigler*, 174 Ill. 2d 281, 286, 673 N.E.2d 290, 293, 220 Ill. Dec. 378 (1996) (holding that the written contract in the case was incidental to the plaintiff's cause of action and applying the five-year statute of limitations rather than the 10-year statute of limitations for written contracts.); *Sabath v. Mansfield*, 60 Ill. App. 3d 1008, 15, 18 Ill. Dec. 8, 377 N.E.2d 161 (1978) ("[a] suit for fraud committed in the breach of a written contract is governed by the five year statute [of limitations] ...").

[2] Count XII is for tortuous interference with a prospective economic advantage. Specifically, Memorylink alleges that it had an exclusive right to the financial benefit bestowed by the '352 Patent, and it was "fraudulently induced" into signing away its intellectual property rights. Because Count XII relies on the same allegations as the fraud claims—and tortuous interference is also subject to a five-year statute of limitations—this claim is also time barred for the reasons discussed in part A. *E&J Gallo Winery v. Morand Bros. Beverage Co.*, 247 F. Supp. 2d 979, 987 (N.D. Ill. 2003).

[3] Count IX is for "Promissory Fraud" and alleges that Motorola made "false promises of future actions to Memorylink" including "promises of entering into definitive agreements" regarding future collaborations. Memorylink also alleges that on April 30, 2003, Motorola told Memorylink that it was no longer interested in Memorylink's wireless technology and was ceasing all development efforts. (Compl. ¶ 125) Accordingly, Memorylink was aware that Motorola had broken its alleged promises when it received this letter. For Count IX to have been timely, this claim should have been brought before the end of April 2008.

of diligence in seeking a lawyer's opinion—will not delay the running of the limitations clock."). Count X is dismissed.

C. *The Breach of Fiduciary Duty Claim is Untimely*

Memorylink and Motorola signed a Memorandum of Understanding stating: "Nothing in this MOU will be interpreted to constitute or create a joint venture, partnership … or fiduciary relationship between the parties …" (Compl. Ex. 3). Nevertheless, Memorylink alleges that by virtue of Motorola's size, resources and patent experience, Motorola had a fiduciary duty to ensure that Memorylink understood the patent application process. For example, Memorylink contends it was entitled to receive a legal explanation from Motorola regarding the effect of the Assignment, the meaning of the joint patent agreement and "who qualifies as an inventor" under the patent laws. (Compl. ¶ 199) Memorylink argues that, "If an explanation of inventorship, assignment and joint ownership was made to Strandwitz and Kniskern, they would not have assigned any of their rights in the Invention to Motorola, and they would have objected to the addition of the Motorola's employees being added as co-inventors on the patent application." (Compl. ¶ 66) Thus, Memorylink claims Motorola breached its fiduciary duty because "no one from Motorola at any time advised Strandwitz and Kniskern as to the legal significance of their signatures on the Assignment" or of the legal significance of the inclusion of Motorola's engineers on the patent application. (Compl. ¶ 74) This argument suffers from the same fatal shortcoming as the claims discussed *supra*; lateness.

Memorylink executed the following documents without the assistance of legal counsel:[4]

[4] Memorylink was receiving legal advice from the law firm Banner & Witcoff by at least January 2003. (Compl. Ex. 17)

Date	Legal Instrument
January 13, 1997	First Memorandum of Understanding (Compl. Ex. 3)
April 4, 1998	Invention disclosure form listing Strandwitz, Kniskern, Wyckoff and Schulz as co-inventors (Compl. ¶ 63)
June 11, 12, 1998	The Assignment (Compl. ¶ 69)
June 22, 1998	The '352 Patent Application (Compl. ¶ 75)
August 27, 2001	Second Memorandum of Understanding (Compl. Ex. 13)

Under Illinois law, the statute of limitations on breach of fiduciary duty claims is five years. 735 ILCS 5/13-205. Memorylink filed this complaint on June 9, 2008. Looking at the chart, it appears that Memorylink's claims should have been brought well before 2008. Once again, Memorylink argues that the statute of limitations should be tolled because it was unaware of its legal claims. Once again, this argument is unconvincing. In fact, Judge Kocoras recently considered—and rejected—a similar claim.

In *Walker*, the plaintiff sued the administrators of her trust for breach of fiduciary duty. *Walker v. Northern Trust Co.*, No. 06 C-4901, 2008 U.S. Dist. LEXIS 4363, *13 (N.D. Ill. Jan. 22, 2008). Although the plaintiff waited more than five years to bring her suit, she claimed that her complaint was timely because "she was not aware of the legal injuries alleged in her complaint at the time they occurred." *Id.* at *15. The court, however, rejected this argument because the plaintiff had access to all the documents, and thus, had adequate time to discover her injuries:

> [the plaintiff] had access to the Trust Instrument as well as quarterly information about the size of the trust and its financial activity. Moreover, each time that the Advisory Committee denied a distribution request, they did so in writing and

> often gave reasons for their decisions ... Nothing more was required to alert [the plaintiff] to the possibility that the Advisory Committee members may not have been acting out of concern for her best interest.

Id. at *15-16. Accordingly, the plaintiff was bound by the five-year statute of limitations.

Here, the breach of fiduciary duty claim is premised upon Motorola's failure to dispense legal advice to Memorylink. The failure to advise, however, would have been apparent whenever Memorylink signed an agreement with Motorola. Thus, Memorylink knew that "no one from Motorola, at any time, advised Strandwitz and Kniskern as to the legal significance of their signatures on the Assignment" as early as 1998. The same is true for the documents Memorylink signed regarding the patent application process. Simply put, Memorylink was aware of its injury—not receiving guidance on the substance of the legal documents—as soon as the injuries occurred. Memorylink has always known the facts necessary to make out its claim, therefore, the Court will not excuse Memorylink from its tardiness. Count VII is dismissed.

D. *The Conversion Claims are Untimely*

Memorylink alleges that its intellectual property was converted when Motorola filed the '352 and '938 Patents.[5] (Compl. ¶¶ 75, 80, 241) The statute of limitations on conversions claims is five years, and the statute begins to run on the date of the conversion. 735 ILCS 5/13/205; *See, e.g., Nelson v. Sotheby's Inc.*, 115 Supp. 2d 925, 929 (N.D. Ill. 2000). Here, Motorola applied for the '352 Patent on June 22, 1998, and the patent issued on February 18, 2003. Memorylink was well aware that Motorola was filing this patent. Indeed, Memorylink signed an Assignment granting Motorola joint

[5] The elements of conversion are "(1) defendant's unauthorized and wrongful assumption of control, dominion or ownership over plaintiff's personal property; (2) plaintiff's right in the property; (3) plaintiff's right to immediate possession of the property, absolutely and unconditionally; and (4) plaintiff's demand for possession of the property." *Nelson v. Sotheby's Inc.*, 115 F. Supp. 2d 925, 929 n. 2 (N.D. Ill. 2000)

ownership. The Court cannot accept Memorylink's argument that the filing of the '352 Patent was somehow "fraudulently concealed."

Memorylink claims that in 1998, it had no idea Motorola was filing the "secret" '938 Patent. Even if this is true, Motorola's application was granted on June 3, 2003. Patents are considered matters of public record. 37 C.F.R. 1.11(a) ("The specification, drawings, and all papers relating to the file of: A published application; a patent; or a statutory invention registration ***are open to inspection by the public*** ...") (emphasis added). This complaint was filed on June 9, 2008, and was thus untimely. To be sure, dismissal via statute of limitations may seem harsh, but Memorylink was not required to engage in a mad dash to the courthouse. Memorylink had five *years* in order to compose a short and plain statement of its allegations. It chose, however, to remain silent and has thus waived its opportunity to present its claims. Counts XI, XVII, XIX are dismissed.

E. *Memorylink Cannot Establish Patent Infringement*

Motorola is a joint owner of the '352 Patent by virtue of the Assignment. It is axiomatic that a joint owner of a patent cannot be liable for infringement. 35 U.S.C. § 262 (authorizing each joint owner to use the patented invention "without the consent of ... the other owners"). Therefore, Memorylink's complaint fails to state a claim for patent infringement. Count IV is dismissed.

F. *Memorylink's Complaint and Exhibits Contradict its Claim that it is the Sole Inventor of the '352 Patent*

In Count I of the complaint, Memorylink seeks to "correct" the inventorship of the'352 Patent. Memorylink alleges that Strandwitz and Kniskern were the sole developers of the Invention, and therefore, Motorola's engineers should not be listed as co-inventors. Motorola counters by arguing that the allegations in the pleadings—

including the attached exhibits—so thoroughly contradict Memorylink's claims that Memorylink has pleaded itself out of court. The Court agrees.

Most complaints are attacked for the failure to plead an essential element of a claim. But every now and then, a complaint comes under fire for pleading *too much.* A plaintiff can plead himself out of court by alleging facts in his complaint which, if accepted as true, would preclude recovery. For example, in *McCready v. Ebay, Inc.*, the plaintiff alleged that eBay violated the Fair Debt Collections Practices Act by suspending his account. 453 F.3d 882, 885 (7th Cir. 2006). The FDCPA only applies to debt collectors, so the court's initial analysis centered on whether eBay qualified as a debt collector under the Act. The FDCPA defines debt collectors as "any person who uses any instrumentality of interstate commerce or the mails in any business the principal purpose of which is the collection of any debts, or who regularly collects or attempts to collect, directly or indirectly ..." *Id.* at 888. After reviewing McCready's complaint, the Seventh Circuit concluded that he had pleaded himself out of court because the facts alleged in the pleadings demonstrated that eBay was not a debt collector under the FDCPA:

> McCready admits that eBay's principal purpose is not to collect debts … What matters is not which prong of the FDCPA applies, but McCready's allegation that eBay suspended his account until he "resolve" or "rectify" the fraud complaints outstanding against him.
>
> To be a "debt collector" under the FDCPA entails engaging in some affirmative conduct with regard to collecting a debt. McCready's allegations make clear that eBay has remained passive and, at most, refused to act until he resolves controversies with people independent of eBay, without threatening to take collection action against McCready should he not satisfy his customers. In no way can this be construed as an effort by eBay to "collect" a debt.

Id. at 888-889. Thus, the complaint was dismissed.

The reasoning in *McCready* is consistent with the Seventh Circuit's earlier decision in *Thomas v. Farley*, 31 F.3d 557 (7th Cir. 1994). In *Thomas*, an inmate accused a prison official of inflicting cruel and unusual punishment by not letting him attend his mother's funeral. *Id.* 558. The inmate brought suit under 42 U.S.C. §1983, and alleged that a secretary inadvertently misplaced the authorization forms, thus the guards were unable to confirm that he had received permission to leave the prison. *Id.*

First, the court noted that the Federal Rules of Civil Procedure do not require a plaintiff to draft a complaint with particularity. *Id.* But, the court noted that "if a plaintiff does plead particulars, and they show that he has no claim, then he is out of luck—he has pleaded himself out of court." *Id.* The facts in the inmate's complaint—specifically the allegation that the secretary mistakenly misplaced the authorization forms—were tantamount to a charge of negligence. Negligence, however, is not actionable in a §1983 claim for cruel and unusual punishment. Thus, the plaintiff had pleaded himself out of court, and the complaint was dismissed. *Id.*

Here, as in *McCready* and *Thomas*, the facts in Memorylink's complaint show that it cannot establish a claim. The reason is simple: Memorylink's complaint includes a number of exhibits that contradict its assertion that it was the sole creator of the patented technology. For example:

- Memorylink's Technology Overview described the goals of the parties regarding their working relationship. The documents states that groundbreaking developments in wireless video transmission technology are possible because Motorola developed "the first commercially viable integrated circuitry to provide high speed, digitally formatted data transmission …" and Memorylink created "a highly integrated, multimedia processor and communication control circuit utilizing a proprietary audio/video data transfer format." (Compl. Ex. 4 at 1)

- An April 1998 letter from Motorola patent manager Hugh Dunlop stated that he understood Strandwitz and Kniskern had jointly developed the subject of the '352

Patent with Motorola employees Schulz and Wyckoff. Dunlop asked Strandwitz to "please let me know if you or [Kniskern] disagree with this determination of the inventorship." (Compl. ¶ 46; Ex. 5 at 1) Memorylink offered no objections.

- In May 1998, the parties finalized the Patent agreement, which stated that the parties were "in the process of defining a specification … in which a ***Motorola*** design of a 5GHz radio will be incorporated." (Compl. Ex. 6 at 1) (emphasis added)

- On June 22, 1998, Motorola filed the patent application for what eventually issued as the '352 Patent. The patent application listed Kniskern, Schulz, Strandwitz , and Wyckoff as inventors. (Compl. ¶ ¶75, 76; Compl. Ex. 9)

Memorylink's complaint and the attached exhibits make clear that Motorola contributed in *some way* to the development of the '352 Patent. Perhaps Memorylink made the lion's share of the contributions, but the law only requires "that joint inventors make some contribution to the final inventive thought." *Lert v. A.C. Neilsen Co.*, No. 92-C2216, 1994 U.S. Dist. LEXIS 12963, at *11 (N.D. Ill. Sept. 13, 1994). Indeed, 35 U.S.C. § 116 expressly states that an individual can be a joint inventor even though "(1) they did not physically work together or at the same time, (2) each did not make the same type or amount of contribution, or (3) each did not make a contribution to the subject matter of every claim of the patent."

If Motorola really contributed nothing to the patent, then it seems to the Court that Memorylink would have offered some type of objection to the patent application; especially because the application must be *submitted under oath.* 35 U.S.C. § 115. The Court finds that in light of the attached exhibits to the complaint, Memorylink has pleaded itself out of court. Count I is dismissed.

G. *Memorylink's Complaint States a Claim to Correct the Inventorship of the '938 Patent*

Memorylink argues the '938 Patent was based on the technology that was invented by Memorylink and stolen by Motorola. Specifically, Memorylink alleges that the patent application depicts two video camcorders that bear "unmistakable similarities" to the modified video camcorders Memorylink developed to demonstrate its technology. Moreover, because Memorylink left the modified camcorders with Motorola, Memorylink contends that Motorola had ample time and opportunity to "steal" the invention. Motorola argues that Memorylink does not have standing to bring this claim. According to Motorola, if the Court determines that Strandwitz and Kniskern are the true inventors of the patent, then the ownership rights will vest in Strandwitz and Kniskern, not Memorylink. Thus, Motorola claims that even if the Court decides in Memorylink's favor, the decision would not redress their injury. The Court disagrees.

The Complaint alleges that Strandwitz and Kniskern were employees of Memorylink and had agreed to assign all their patent rights to Memorylink. It stands to reason that if Motorola had included Strandwitz and Kniskern on the '938 Patent application, the inventors would have been contractually obligated to assign their patent rights to Memorylink. In fact, this very sequence occurred with respect to the '352 Patent, and Memorylink argues that it would occur again. This scenario rises above "mere speculation" and passes the threshold to survive a motion to dismiss. The motion to dismiss Count V is denied.

H. *Memorylink can not Maintain an Action for Correction of the Pending Patent Applications*

Counts XIII and XIV allege that two of Motorola's pending patent applications erroneously list Wyckoff and Schulz as the sole inventors, when in fact, Strandwitz and Kniskern are the true inventors. Motorola argues that "the statute that governs the

correction of inventorship applies only to ***issued*** patents, so this clam cannot stand." (Mot. to Dismiss at 23) (emphasis in original). Motorola is partially correct. 35 U.S.C. § 256 does in fact only apply to issued patent. But, Congress has also provided an avenue to correct *pending* patent applications. Indeed, 35 U.S.C. § 116, states that, "Whenever through error a person is named in an ***application*** for patent as the inventor, or through error an inventor is not named in an application…the Director may permit the application to be amended accordingly …" (emphasis added) Thus, the real question is whether district courts have jurisdiction to adjudicate cases seeking to correct a pending patent application. The answer is no.

Whenever a court engages in statutory interpretation, the starting point must be the text of the statute. Here, the language of 35 U.S.C. § 116 states that the "Director" of the U.S. Patent office may permit patent applications to be amended. There is no mention of the district courts. This omission is critical because in 35 U.S.C. § 256 Congress expressly bestowed the district courts with jurisdiction to order corrections of issued patents: "the ***court*** before which such matter is called in question may order correction of the patent." (emphasis added) Thus, Congress provided district courts with explicit textual authority to hear cases involving issued patents. When it came to drafting 35 U.S.C. §116, however, Congress removed the word "Courts" and replaced it with "Director." Accordingly, the Court concludes that it has no authority to order the correction of a pending patent application. *See, e.g., Eli Lilly & Co. v. Aradigm Corp.*, 376 F.3d 1352, 1356 n. 1 ("The text of section 116, however, only grants the Director of the Patent and Trademark Office the authority to take certain actions and plainly does not

create a cause of action in the district courts to modify inventorship on pending patent applications."). Counts XIII and XIV are dismissed.

I. *Memorylink has Stated a Claim for Breach of the Non-Disclosure Agreements*

Count VI alleges that Motorola violated the terms of its non-disclosure agreement with Memorylink. Motorola does not dispute that the parties had a non-disclosure agreement but argues that the claim should be dismissed because Memorylink failed to: (1) attach the actual contract; (2) allege the parties' obligations under the contracts; (3) allege how Motorola breached the contract; or (4) state how the alleged breach harmed Memorylink. Motorola's arguments, however, ignore the allegations of the complaint.

First, a party in federal court is not required to attach the operative contract to the complaint. *See, e.g., Arnold v. Janssen Pharmaceutica, Inc.*, 215 F. Supp. 2d 951, 962 (N.D. Ill. 2002) (stating that, "federal courts, unlike Illinois state courts, do not require that critical documents be attached to the complaint."); *Mt. Hawley Ins. Co. v. Guardsmark, Inc.*, No. 01-C5088, 2001 U.S. Dist. LEXIS 9196, 2001 WL 766874 (N.D. Ill. July 5. 2001) (denying a motion to dismiss premised on the grounds that the plaintiff had not attached the contract to the pleadings). It bears repeating, a plaintiff does not need to, "plead particular legal theories or particular facts in order to state a claim. All that is required is a short and plain statement of the claim that will give the defendant fair notice of what the plaintiff's claim is and the grounds upon which it rests." *DeWalt v. Carter*, 224 F.3d 607, 612 (7th Cir. 1999). Here, Memorylink has alleged that it signed a non-disclosure agreement with Motorola and Motorola breached that agreement by disclosing Memorylink's technology to third parties. Specifically, Memorylink alleges

that Motorola allowed the Sony Corporation (and possibly others during various trade shows) to examine Memorylink's modified camcorders, and that Motorola eventually used the modified camcorders to file the '938 Patent, and possibly other patents.

Thus, Motorola knows exactly which incident allegedly caused the breach of the agreement, to whom Motorola allegedly disclosed the confidential information, and the nature of the alleged harm, *i.e.*, a third parties had access to Memorylink's groundbreaking technology and may have used that technology for their own gains. Memorylink—without the benefit of discovery—cannot be asked to provide specific details regarding the meeting between Motorola and another corporation. The Court finds that Motorola has more than enough information to put it on notice of Memorylink's claim.[6] The motion to dismiss Count VI is denied.

J. *Memorylink can not Maintain an Action for Unjust Enrichment*

To succeed on a claim of unjust enrichment, "a plaintiff must allege that the defendant has unjustly retained a benefit to the plaintiff's detriment, and that the defendant's retention of that benefit violates fundamental principles of justice, equity, and good conscience." *Firemen's Annuity & Ben. Fund v. Municipal Employees', Officers', & Officials' Annuity & Ben. Fund.*, 219 Ill. App. 3d 707, 712, 579 N.E.2d 1003, 162 Ill. Dec. 189 (Ill. App. 1st Dist. 1991) Count XV alleges that Motorola has been unjustly enriched by retaining Memorylink's "intellectual and confidential proprietary information." Motorola argues that this claim should be dismissed because the quasi-

[6] Motorola also argues that this claim is untimely because it is really a fraud claim and thus subject to the five-year statute of limitations. This is a stretch. In fact, Motorola's motion to dismiss includes a chart outlining Memorylink's claims and the grounds for dismissal. (Appendix A to the Motion to Dismiss) On the chart, there is a heading for "Type of Claim" and Motorola lists the Breach of Non-Disclosure Agreement claim under the "Contract" category. There can be no dispute; Count VI is premised on a breach of contract and is therefore subject to the 10-year statute of limitations.

contract theory of unjust enrichment is unavailable where the parties have a contractual relationship. *See, e.g., Keck Garrett & Assocs., Inc., v. Nextel Commc'ns, Inc.*, 517 F.3d 476, 487 (7th Cir. 2008) ("Illinois law does not permit a party to recover on a theory of quasi-contract when an actual contract governs the parties' relations on that issue."). Therefore, Motorola argues that because the parties agreed to an Assignment and a Memorandum of Understanding, Memorylink cannot recover for unjust enrichment.

Motorola's argument hits the mark. Memorylink and Motorola entered into four separate MOUs. In fact, Memorylink attached these agreements to its complaint. (Compl. Ex. 4, 13, 14, 16). Each of these agreements governs "the intentions of the parties relative to a strategic business relationship between them." (Compl. Ex. 16). In response, Memorylink claims that because "it has not alleged that the MOUs were binding," there was no valid contract. The language of the MOUs, however, tells a different story. Paragraph 7 of the MOU states, "This MOU sets forth the current intent of the parties … but in no way gives rise to any legal obligations *except under paragraphs 3, 4, 5, 6, and 7*." (Compl. Ex. 16) The aforementioned paragraphs govern the disclosure of confidential information, the costs associated with development, the independent contractor status of the parties, and the freedom of each party to "retain all rights to its own concepts and technology." Moreover, paragraph 8 states, "This MOU will be governed and interpreted in accordance with the domestic laws of the State of New York." Thus, it seems to the Court that the parties intended the MOU to have some legal effect.

Here, the parties entered into multiple contracts regarding their obligations toward each other while they developed new technology. Because these MOUs were signed,

enforceable contracts regarding the subject matter at issue, there can be no recovery for unjust enrichment. *See, e.g.*, *Moore's Maint. & Installation, Inc. v. Hub Group Distrib. Servs.*, No. 04-C4891, 2006 U.S. Dist. LEXIS 68692, at *13 (N.D. Ill. Sept. 6, 2006) ("Because the plaintiff's unjust enrichment claim for the 11 completed installations is a subject matter covered by the Service Agreement, a separate unjust enrichment claim is not permissible."); *Allied Vision Group, Inc. v. RLI Prof'l Techs., Inc.*, 916 F. Supp. 778, 780-81 (N.D. Ill. 1996) (holding that "because a specific contract [governed] the relationship between Allied and RLI, the court concludes that the doctrine of unjust enrichment has no application in this case.") (internal quotations omitted). Count XV is dismissed.

IV. Conclusion

In sum, the only remaining counts of Memorylink's complaint are Count V (Correction of Inventorship of the '938 Patent) and Count VI (Breach of the Non-Disclosure Agreement). For the reasons set forth in the preceding analysis, the motion to dismiss is GRANTED in part and DENIED in part.

IT IS SO ORDERED.

2/23/09
Dated

Wm. J. Hibbler
The Honorable William J. Hibbler
United States District Court

Order Form (01/2005)

United States District Court, Northern District of Illinois

Name of Assigned Judge or Magistrate Judge	William J. Hibbler	Sitting Judge if Other than Assigned Judge	
CASE NUMBER	08 C 3301	DATE	10/15/09
CASE TITLE	MEMORYLINK CORP. v. MOTOROLA, INC.		

DOCKET ENTRY TEXT:

Enter Memorandum Opinion and Order. The Court GRANTS Plaintiff's motion for reconsideration [71] in part and DENIES it in part. Counts I, III, IV, V, and VI of Memorylink's complaint remain as originally drafted. Counts VII-XII and XVII-XX remain insofar as they are based on the '938 Patent. In addition, the Court gives Plaintiff leave until October 29, 2009 to file an amended complaint in order to include a count alleging breach of contract. Defendant has until November 12 to respond. Status is set for December 1, 2009 at 9:30 a.m.

■[For further details see separate order(s).] Docketing to mail notice.

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IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

MEMORYLINK CORPORATION,	)	
	)	
Plaintiff,	)	
	)	No. 08 C 3301
v.	)	
	)	The Honorable William J. Hibbler
MOTOROLA, INC.,	)	
	)	
Defendant.	)	

MEMORANDUM OPINION AND ORDER

On February 23, 2009, this court granted Defendant Motorola's Motion to Dismiss as to seventeen of the nineteen counts in Plaintiff Memorylink's complaint, and denied the motion as to Counts V and VI. Memorylink moves for reconsideration of the Court's decision on fifteen of the counts.[1] Memorylink argues that the Court applied the incorrect standard of review on a motion to dismiss under Rule 12(b)(6), conducted the wrong analysis in order to determine the proper inventors of the '352 patent, and ignored facts alleged in the Complaint. For the reasons set forth below, the Court grants Memorylink's motion in part and denies it in part. Additionally, the Court grants Memorylink's alternative request to file an amended complaint.

BACKGROUND

The following facts are taken from Memorylink's complaint and corresponding exhibits, and are quoted directly from the Court's previous opinion. *See Memorylink Corp. v. Motorola, Inc.*, No. 08 C 3301, 2009 WL 464338, *1-*3 (N.D. Ill. Feb. 23, 2009). In 1996, Peter Strandwitz and Robert Kniskern developed technology that enabled the wireless transmission of real time video. (Compl. ¶¶ 11, 15, 20.) About a year later, Strandwitz approached Motorola to

[1] Memorylink does not contest the Court's dismissal of Counts XIII and XIV.

explore the possibility of entering into a business relationship. (Compl. ¶¶ 11-17.) Strandwitz believed that combining his video compression technology with Motorola's radio transmission technology would result in a lucrative business partnership; Motorola agreed. (Compl. ¶ 13.) On January 13, 1998, the parties signed a Memorandum of Understanding outlining the terms of their relationship. (Compl. Ex. 3.) The MOU stated that the parties would combine their technologies to develop a preliminary specification, and the resulting model would be "jointly owned." (Compl. Ex. 3.) Additionally, the MOU stated that each party was an independent contractor "in all aspects" and there was no fiduciary relationship between the parties. (Compl. Ex. 3.) After signing the agreement, Strandwitz and Kniskern incorporated Memorylink; Strandwitz was the CEO and Kniskern was a director. (Compl. ¶ 24.)

In February 1998, Memorylink – in "anticipation of filing one or more patent applications" – drafted a document entitled the "Wireless Multimedia Core Technology Overview" that described the goals of the parties regarding their working relationship. (Compl. Ex. 4.) The Technology Overview stated that a unique market opportunity existed because of "the creation by Motorola, Inc., of the first commercially viable integrated circuitry to provide high speed, digitally formatted data transmission ... and the creation by Memorylink Corp., of a highly integrated, multimedia processor and communication control circuit utilizing a proprietary audio/video data transfer format." (Compl. Ex. 4.)

Over the next few months, Memorylink demonstrated several applications of its new technology. (Compl.¶¶ 29-32.) For example, on February 25, 1998, Memorylink modified two Sharp video camcorders so that camera A wirelessly transmitted real-time video footage that was displayed by camera B. (Compl. ¶ 30.) Memorylink accomplished this by equipping the camcorders with its video compression technology, which allowed the camcorders to use

Motorola's radio technology to transmit the images. (Compl. ¶ 31.) According to Memorylink, Motorola was "blown away" and "astonished" by the demonstrations. (Compl. ¶ 32.) When the demonstration concluded, Motorola asked Memorylink to leave the modified camcorders with Motorola's engineers; Memorylink complied. (Compl. ¶ 33.) The demonstration convinced Motorola that synergies existed between Motorola and Memorylink, and the parties decided to work on a patent application. (Compl. ¶¶ 32, 39.)

Strandwitz and Kniskern had very little patent experience, so when Motorola suggested that its legal department should handle the patent application, Memorylink readily agreed. (Compl. ¶ 39.) On April 13, 1998, Hugh Dunlop, a Motorola senior patent manger, sent a letter to Strandwitz stating that Motorola had reviewed the Technology Overview in order to identify a "basis for patent applications that might be filed as a result of the design effort between Motorola and Memorylink." (Compl. Ex. 5.) Dunlop suggested the parties file a "joint patent application" and included a Patent Filing Agreement for Memorylink to review. (Compl. Ex. 5.) Dunlop also stated that it was his understanding that Memorylink worked with Gary Schulz and Jan Wyckoff two Motorola engineers – to develop the invention underlying the prospective patent:

> It is my understanding from Gary Schulz and Jan Wyckoff that the inventors for these ideas are yourself, Gary, Jan, and Bob Kniskern. Please let me know if you or Bob disagree with this determination of inventorship.

(Compl. Ex. 5.) Memorylink did not object to Dunlop's characterization of the inventorship. (Compl. ¶¶ 54, 64.)

On April 21, 1998, the parties met to discuss potential patent applications. (Compl. ¶ 62.) At the meeting, Strandwitz and Kniskern signed an invention disclosure form listing themselves, Schulz and Wyckoff as joint inventors of the soon-to-be patented invention. (Compl. ¶ 63.) In June 1998, Kniskern and Strandwitz executed an Assignment to transfer their

rights in the prospective invention and any resulting patents to Memorylink. (Compl. ¶ 69.) Wyckoff and Schulz executed the same document, thus transferring their rights in the prospective invention and resulting patents to Motorola. (Compl. ¶ 69.) The Assignment provided that Memorylink and Motorola would hold "jointly and equally, the entire right, title and interest in" any resulting patents. On June 22, 1998, Motorola's in-house lawyers finished their preparation of the patent application and filed it with the United States Patent Office as U.S. Patent Application Serial No. 09/102,457 titled "Self Contained Wireless Camera Invention, Wireless Camera System and Method." (Compl. Ex. 9.) The application was granted on February 18, 2003, as U.S. Patent No. 6,522,352 (the '352 Patent). (Compl. Ex. 1.)

Two days after Motorola filed the '352 Patent application, it filed a second patent application titled "Self-Contained Camera Invention and Method for Capturing and Communicating Images via am Modem." (Compl. ¶ 80.) Motorola listed Schulz and Wyckoff as the inventors on the application, but there was no mention of Strandwitz or Kniskern. (Compl. ¶ 81.) Memorylink alleges that the application depicts two video camcorders that bear "unmistakable similarities" to the modified video camcorders Memorylink developed to demonstrate its technology. Moreover, because Memorylink left the modified camcorders with Motorola, Memorylink contends that Motorola had ample time and opportunity to "steal" the invention. (Compl. ¶¶ 83-84.) Motorola's application was granted on June 3, 2003, as U.S. Patent No. 6,573,938 (the ' 938 Patent). (Compl. Ex. 2.) Memorylink contends it was unaware of this patent filing until November 29, 2007. (Compl. ¶ 85.)

In light of these facts, Memorylink alleges that Motorola fraudulently induced it to: (1) name Motorola's engineers as co-inventors of the '352 Patent; and (2) give Motorola joint ownership of the '352 Patent. In Memorylink's own words:

> Motorola made false statements and/or omissions of material fact concerning the explanation of the inventorship, the Assignment and the legal effects of joint ownership of the patent right. If an explanation of inventorship, assignment and joint ownership was made to Strandwitz and Kniskern, they would not have assigned any of their rights in the Invention to Motorola, and they would have objected to the addition of the Motorola's employees being added as co-inventors on the patent application.

(Compl. ¶ 66.) Memorylink further alleges that "no one from Motorola at any time advised Strandwitz and Kniskern as to the legal significance of their signatures on the Assignment-namely that they were giving away a significant portion of their patent rights to Motorola for free." (Compl. ¶ 71.) Memorylink claims the fraud was particularly egregious because Motorola made no significant contributions to the development of the Invention.

Finally, Memorylink claims that Motorola – without Memorylink's knowledge or consent – used the modified camcorders from Memorylink's demonstrations in order to "secretly" file a second patent (the '938 Patent), which did not list Memorylink as an inventor:

> Motorola knew that the application for the Secret Patent would be unpublished meaning that it was not publicly available, until after the Secret Patent issued, thus making it less likely that Memorylink would discover the Secret Patent or Motorola's overall scheme to steal Memorylink's technology or intellectual property rights.

(Compl. ¶ 83.) Thus, Memorylink claims it was cheated out of the opportunity to file its own version of the '938 Patent.

DISCUSSION

I. Standard of review

In a case such as this, where the movant presents no newly discovered evidence, the Court will grant a motion for reconsideration only if it made a "manifest error of law or fact" in issuing its original decision. *Hicks v. Midwest Transit, Inc.*, 531 F.3d 467, 474 (7th Cir. 2008). A "manifest error" means an error of apprehension, not of reasoning, *Bank of Waunakee v.*

Rochester Cheese Sales, Inc., 906 F.2d 1185, 1191 (7th Cir. 1990), and can be summarized as the "wholesale disregard, misapplication, or failure to recognize controlling precedent." *Oto v. Metro. Life Ins. Co.*, 224 F.3d 601, 606 (7th Cir. 2000) (quoting *Sedrak v. Callahan*, 987 F. Supp. 1063, 1069 (N.D. Ill. 1997).

II. Analysis

A. Correction of the inventors on the '352 patent

In Count I of its complaint, Memorylink sought to correct the inventors of the '352 Patent to reflect that only Strandwitz and Kniskern are the proper inventors. Memorylink argues that the Court committed two major errors in dismissing this count. First, Memorylink contends that the Court failed to conduct a proper, claim-by-claim analysis of the patent before dismissing the count. Second, Memorylink claims the Court's reliance on certain documents was improper.

Memorylink cites *Trovan, Limited v. Sokymat SA, Irori*, 299 F.3d 1292, 1302 (Fed. Cir. 2002), for the proposition that inventorship must be determined through a two-step claim-by-claim analysis whereby the court first construes each asserted claim to determine its subject matter and then compares the purported contributions of each alleged co-inventor with the subject matter of the construed claims. *Trovan* does indeed set this process forth as the proper analysis for courts to undertake in order to determine inventorship. However, *Trovan* also states that the reason courts should rely on this claim-by-claim analysis is to account for the fact that "co-inventors need not 'make a contribution to the subject matter of every claim of the patent.'" *Id.* (quoting 35 U.S.C. § 116). "A contribution to one claim is enough." *Ethicon, Inc. v. U.S. Surgical Corp.*, 135 F.3d 1456, 1460 (Fed. Cir. 1998). Given this principle underlying the claim-by-claim analysis, the Court recognized that the unique circumstances of this case might allow for dismissal without such a precise examination of the facts. *Memorylink*, 2009 WL 464338, at

*10. As the Court noted in its previous opinion, Memorylink's complaint and attachments indicate that Motorola gave Strandwitz, Kniskern, and Memorylink the opportunity to object to the inventors listed on the patent, and they declined. *Id.* As a result, the Court concluded that Memorylink pleaded itself out of court, eliminating the need to conduct any claim-by-claim analysis. *Id.* The Court did not inspect each claim of the patent to determine whether Schulz and Wyckoff contributed to the subject matter of those claims because Memorylink had in effect already conceded that to be the case. *Id.*

Memorylink's second argument regarding Count I is that the Court improperly relied on certain attachments to its Complaint in order to come to the conclusion that it did in fact plead itself out of Court. Memorylink points out that the first three documents relied upon by the Court were drafted before the claims in the patent. The last document includes the claims, but is the application for the patent. Memorylink argues that by taking the application itself into account, the Court partially nullified the purpose of the statute allowing correction of inventorship because it essentially presumed the application to be true.

The Court recognizes that it is possible that the subject matter of the '352 Patent may vary from what was covered by the first three documents reviewed by the Court, wherein Memorylink acknowledged the contributions of Motorola and its employees. Thus, viewing these documents in the light most favorable to Memorylink, they do not support a conclusion that Memorylink has conceded the inventorship of the '352 Patent to be correct as a matter of law. The patent application does not support this conclusion either. First, the Court cannot determine from the pleadings whether Memorylink ever reviewed or approved the application itself. Second, the statute providing for correction of inventorship, 35 U.S.C. § 256, allows for correction in the case of mistake. Thus, even if Memorylink did approve the application, it may

proceed on the theory that it did so in error. For these reasons, the Court cannot conclude that Memorylink pleaded itself out of court. The Court therefore grants Memorylink's motion as to Count I of the Complaint, and reverses its previous decision to dismiss that count.

B. Statutes of limitations

Memorylink next takes issue with the Court's decision to dismiss many of its claims on the grounds that the applicable statutes of limitations had run. Virtually all of Memorylink's arguments with regard to the '352 Patent are based on its claim that Motorola was serving as its legal counsel. However, Memorylink's complaint does not support this claim. Memorylink did allege that Motorola served as Memorylink's counsel at various points in the Complaint. (Compl. ¶¶ 48, 71.) However, taking these allegations as true, the Complaint indicates that Memorylink decided to appoint Motorola as counsel subsequent to its acknowledgement of Motorola's contribution to the invention in question. (*Id.*) Moreover, Memorylink's agreement not to enter into any sort of fiduciary relationship undermines its claim that Motorola was its legal representative. (Compl. Ex. 3.) Thus, the Court did not commit manifest error by finding that Memorylink was aware of the alleged injuries before it may have regarded Motorola as its legal counsel.

However, one of Memorylink's claims regarding the '352 Patent that the Court previously dismissed as untimely is not based on Motorola's alleged role as Memorylink's counsel. In Count III of its complaint, Memorylink claims that the Assignment is void for lack of consideration. The Court treated this as a fraud claim, understanding it as a claim that Memorylink was "duped into executing the Assignment and got nothing in return." *Memorylink*, 2009 WL 464338, at *6 fn.1. In fact, Count III sounds in contract law, despite the fact that it sits within the context of a complaint that frequently alleges that Motorola defrauded Memorylink.

The Count does not rest on a theory that Memorylink executed the Assignment as a result of the fraud of Motorola. Instead, it simply questions whether the Assignment contained proper consideration. Because the statute of limitations for contract claims in Illinois has not yet run, the Court grants Memorylink's motion as to Count III. However, the Court denies Memorylink's motion for reconsideration as to the Court's dismissal of Counts II, VII-XII, and XVII-XX insofar as they are based on the '352 Patent.

As to the '938 Patent, Memorylink argues that the Court improperly found that the date ran as soon as the patent issued publicly. The Court held that the issuance of the patent put Memorylink on constructive notice of its claims, thereby triggering the statutes of limitations. However, the Federal Circuit has rejected this approach. *Advanced Cardiovascular Sys., Inc. v. Scimed Life Sys., Inc.*, 988 F.2d 1157, 1161-62 (Fed. Cir. 1993). Although the court in *Advanced Cardiovascular Systems* was addressing a defense of laches, rather than a statute of limitations, there does not appear to be any reason to treat them differently in this instance. The statutes actually began to run when Memorylink had a duty to inquire into whether Motorola was filing an application for the '938 Patent. The Court cannot determine when that was based on the pleadings alone. Thus, the Court grants Memorylink's motion for reconsideration as to the Court's dismissal of Counts VII-XII and XVII-XX insofar as they are based on the '938 Patent.

C. Patent infringement

Given that the Court has granted Memorylink's motion as to Count III, Memorylink may be able to show that the Assignment of rights to Motorola was invalid. The Court previously denied Memorylink's claim for patent infringement on the theory that a joint owner of a patent (such as Motorola) cannot be liable for infringement. *See* 35 U.S.C. § 262. If Memorylink

succeeds on Count III, its claim for patent infringement may also be viable. Thus, the Court grants Memorylink's motion as to Count IV.

D. Unjust enrichment

The Court is not moved by Memorylink's argument for reconsideration of the dismissal of its unjust enrichment claim. Memorylink argues that the Court's determination that the MOUs at issue did create some relevant legal obligations was improper because "even Motorola asserted that Motorola had no obligations under the Memoranda." Even if this was Motorola's position, the Court independently determined the meaning of the MOUs based on their express language. *Memorylink*, 2009 WL 464338, at *13. Thus, the Court denies Memorylink's motion as to Count XV. The Court grants Memorylink leave to file an amended complaint with a count alleging breach of contract in order to take this ruling into account.

CONCLUSION

For the reasons above, the Court GRANTS Memorylink's motion in part and DENIES it in part. In sum, Counts I, III, IV, V, and VI of Memorylink's complaint remain as originally drafted. Counts VII-XII and XVII-XX remain insofar as they are based on the '938 Patent. In addition, the Court GRANTS Memorylink leave to file an amended complaint in order to include a count alleging breach of contract.

IT IS SO ORDERED.

10/15/09
Dated

Wm. J. Hibbler
Hon. William J. Hibbler
United States District Court

Order Form (01/2005)

United States District Court, Northern District of Illinois

Name of Assigned Judge or Magistrate Judge	William J. Hibbler	Sitting Judge if Other than Assigned Judge	
CASE NUMBER	08 C 3301	DATE	4/7/2010
CASE TITLE	MEMORYLINK CORP. v. MOTOROLA, INC.		

DOCKET ENTRY TEXT:

The Court GRANTS Defendant's renewed motion for judgment on the pleadings [107] as to Counts IX, X, and XVII-XX, but DENIES it as to Counts XXIII-XXVI. The Court GRANTS Defendant's motion for reassignment [97].

■[For further details see text below.] Wm. J. Hibbler Docketing to mail notice.

STATEMENT

On December 7, 2009, the Court denied Defendant Motorola's original motion for judgment on the pleadings with prejudice as to Counts III and IV and without prejudice as to Counts IX, X, and XVII-XXI. The Court found some validity in Motorola's arguments that Counts IX, X, and XVII-XX only related to the '352 patent. Because the Court had previously dismissed those claims insofar as they related to the '352 patent, *see Memorylink Corp. v. Motorola, Inc.*, No. 08 C 3301, 2009 WL 3366974, *5 (N.D. Ill. Oct. 15, 2009) (including a more complete statement of the facts underlying this dispute), the Court gave Plaintiff Memorylink leave to file an amended complaint taking those objections into account. Thereafter, Memorylink submitted amended counts to the court pursuant to that order. Motorola now renews its motion, claiming that Memorylink's amended complaint fails to address the concerns the Court previously expressed.

Memorylink did not amend Counts IX, X, and XVII-XX. Instead, it included them in exactly the same form as before for purposes of appeal. Memorylink concedes that the Court's previous order requires dismissal of these counts despite its objections. Thus, the Court grants Motorola's motion as to these counts.

In Counts XXIII-XXVI, Memorylink re-alleges the facts previously contained in Counts XVII-XX, but removes any references to the '352 Patent and specifically references the '938 Patent. Motorola argues that these are superficial amendments that fail to address the underlying issue. That issue, according to Motorola, is that Counts XXIII-XXVI are based on impossible premises. More specifically, each count is based on the premise that the Court might find the '938 Patent to be either invalid due to the fact that it does not list the proper inventors or unenforceable due to Motorola's allegedly inequitable conduct before the U.S. Patent Office. Motorola argues that such a finding is only possible when a defendant in a patent infringement case pleads an affirmative defense of invalidity or unenforceability for inequitable conduct. Because Memorylink

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does not and cannot complain of patent infringement with respect to the '938 Patent, Motorola continues, the Court will never make such a finding.

For support of its position, Motorola cites to the statute providing for affirmative defenses to infringement actions, 35 U.S.C. § 282, and to a number of cases in which defendants set forth defenses of invalidity and unenforceability for inequitable conduct, *see, e.g., Fiskars, Inc. v. Hunt Mfg. Co.*, 221 F.3d 1318, 1321 (Fed. Cir. 2000), including a case that requires pleadings regarding inequitable conduct to meet the Rule 9(b) standards of particularity, *see, e.g., Exergen Corp. v. Wal-Mart Stores, Inc.* 575 F.3d 1312, 1326 (Fed. Cir. 2009). Memorylink responds that none of these cases stand for the proposition that this is the only context in which the issues of invalidity or unenforceability can arise. While Memorylink cites to no case law indicating that these issues arise in other contexts, it suggests that the Court might address them in this case upon Memorylink's motion, its own findings, or upon the motion of an intervening party to whom Motorola licensed the patent for value.

Despite the dearth of case law addressing invalidity and unenforceability outside of the context of infringement suits, the Court agrees with Memorylink. To hold otherwise would lead to absurd results. First, it would mean that if the Court were to find during the course of the proceedings on other counts in this case either that Memorylink is an inventor of the '938 Patent or that Motorola engaged in inequitable conduct before the Patent Office, it would have to ignore the legal implications of that finding. *See Pannu v. Iolab Corp.*, 155 F.3d 1344, 1348-49 (Fed. Cir. 1998) (holding that, under 35 U.S.C. § 102(f), a patent is rendered invalid by the nonjoinder of an actual inventor); *Kingsdown Med. Consultants, Ltd. v. Hollister Inc.*, 863 F.2d 867, 877 (Fed. Cir. 1988) ("[w]hen a court has...determined that inequitable conduct occurred in relation to one or more claims during prosecution of the patent application, the entire patent is rendered unenforceable"). Second, while the Court recognizes that 35 U.S.C. § 256 provides Memorylink with an opportunity to correct the inventorship of the patent without invalidating the patent, *see Pannu*, 155 F.3d at 1350, Section 256 does not address unenforceability due to inequitable conduct, *Stark v. Advanced Magnetics, Inc.*, 119 F.3d 1551, 1556 (Fed. Cir. 1997), nor can it even always remedy invalidity, *Oregon Health & Science Univ. v. Vertex Pharmaceuticals, Inc.*, 233 F. Supp. 2d 1282, 1285 (D. Or. 2002) ("adding [an inventor] in this instance would mean that the patent is necessarily invalid"). This would leave some inventors excluded from patents due to the deceptive conduct of others without any remedy short of infringing the patent, provoking suit, and pleading affirmative defenses. The Court therefore holds that it may make findings of invalidity and unenforceability outside of the context of infringement suits. For this reason, Memorylink's Counts XXIII-XXVI are not based on impossible premises, and will stand. The Court denies Motorola's motion as to these counts.

The Court can dispose of Motorola's motion for reassignment rather easily. In the instant case, Memorylink accuses Motorola of engaging in deceptive conduct, sometimes under the guise of an attorney-client relationship, in order to rob it of its intellectual property through the filing and prosecution of several patents and patent applications. In the case which Motorola seeks to have reassigned, Memorylink accuses Motorola and its employees of committing legal malpractice when they stole the very same intellectual property through the same, or a closely related, course of deceptive conduct. The cases clearly involve many of the same issues of fact or law and grow out of the same transaction or occurrence. *See* LR 40.4(a). Given this Court's familiarity with the overlapping facts and issues, the Court's handling of both cases is likely to result in a substantial saving of judicial time and effort. *See* LR 40.4(b)(2). At the same time, while this Court has spent considerable time and effort on this case already, it has not proceeded far beyond the posture of the other case, where there is a motion to dismiss presently pending. Thus, designating that case as related is not likely to delay these proceedings substantially. *See* LR 40.4(b)(3). Finally, given their similarities, these cases are clearly susceptible of disposition in a single proceeding. *See* LR 40.4(b)(4). Thus, the Court grants Motorola's motion for reassignment of Case No. 09 C 7401.

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

MEMORYLINK CORPORATION	)	
	)	
Plaintiff,	)	
	)	**No. 08 C 3301**
v.	)	
	)	
MOTOROLA SOLUTIONS, INC. and MOTOROLA MOBILITY, INC.	)	**Judge John J. Tharp, Jr.**
	)	
	)	
Defendants.	)	

MEMORANDUM OPINION AND ORDER

Memorylink Corporation ("Memorylink") asserts numerous claims against Motorola Solutions, Inc. and Motorola Mobility, Inc. (collectively, "Motorola") stemming from the parties' business relationship. At the close of fact discovery, Motorola moved for summary judgment on all of Memorylink's claims. For the reasons explained below, Motorola's motion for summary judgment is denied as to Memorylink's "Correction of Inventorship" claim relating to the '352 Patent (Count I), but Motorola's motion is granted with respect to all other claims.

BACKGROUND[1]

In June 1997, Peter Strandwitz, at that time the CEO of Plexus Corp. ("Plexus"), developed the idea of a handheld video camera that could wirelessly transmit video to another camera or monitor. Aware of the limits of his own video expertise, in August 1997 Strandwitz partnered with Bob Kniskern, a wireless video transmission expert who was at that time the president of Adaptive Micro-Ware, Inc. ("Adaptive"), to try to make his idea a reality. According

[1] In deciding a motion for summary judgment, the Court "view[s] the record in the light most favorable to the non-moving party and draw[s] all reasonable inferences in that party's favor." *Trinity Homes LLC v. Ohio Cas. Ins. Co.*, 629 F.3d 653, 656 (7th Cir. 2010). Therefore, for the purposes of this opinion, the Court will resolve all disputed fact issues in favor of Memorylink.

to Memorylink, by October 1997, Strandwitz and Kniskern had firmly conceived of their invention: a handheld camera device (such as a cell phone or camcorder) that transmits and receives video signals by communicating wirelessly with a base station, utilizing video compression/decompression circuitry and control features to optimize bandwidth usage (hereafter, "the Device").

Strandwitz and Kniskern knew that they needed a radio board for the Device because it required wireless signal transmission. Kniskern identified several companies that supplied radio boards that might work with the invention; Motorola was one of these potential suppliers. In late 1997, Strandwitz contacted Motorola's Radio Research Laboratory about a possible relationship with respect to the Device because Motorola was developing 5 GHz wireless radio technology and because Motorola had a lot of radio expertise. Strandwitz believed that Motorola could also provide economic strength, market power, engineering and industry resources, and business opportunities that would benefit the Device. As of October 31, 1997, Strandwitz and Kniskern had engaged in written dialog with Motorola regarding the Device, and thereafter they worked with Motorola on its development. For example, on December 22, 1997, Kniskern sent a letter to Jan Wyckoff, a Motorola engineer, regarding Motorola's efforts to "support the R.F. link and maximum data throughput" of the Device.

Pursuant to its efforts to help develop the Device, Motorola entered into several contractual relationships with various entities related to Strandwitz and Kniskern. On December 26, 1997, Motorola entered into a non-disclosure agreement ("NDA") with Adaptive[2] that restricted the parties' abilities to share information that they learned through their joint

[2] Kniskern signed the NDA on behalf of Adaptive.

enterprise. Next, on January 13, 1998, Motorola agreed to a Memorandum of Understanding ("MOU") with Plexus regarding the Device.[3] The MOU states that "[t]he parties intend to continue the development of a preliminary specification for the Device and to continue discussions about the role each of them would have in the development of the Device if it is mutually decided to proceed with the project." The NDA and MOU both contained provisions explicitly stating that they were non-transferrable without Motorola's prior written consent.

In late December 1997, Strandwitz and Kniskern met with Motorola employees including Wyckoff and Gary Schultz, a Motorola engineer, to discuss the project. The parties agreed that Strandwitz and Kniskern would provide a demonstration of the Device on January 20, 1998. At the meeting, Motorola gave Strandwitz and Kniskern basic information about the radio board that it provided for purposes of the demonstration. On January 20, Strandwitz and Kniskern demonstrated the Device as planned. The demonstration involved a one-way wireless link from a portable camera device located inside a child's lunchbox to a receiver attached to a video monitor. The demonstration was a success. Memorylink contends that Motorola's only contribution to the January 20, 1998 demonstration was the old, generic radio board that it had provided.

After the January 20, 1998 demonstration, the parties determined that the technology would be better demonstrated using a camcorder. Strandwitz went to an electronics store with Schulz and Wyckoff (both of Motorola), and Schulz bought Sharp camcorders for use in the next demonstration. The next day, Strandwitz sent a letter to Tom Waltz, Motorola's Director of

[3] Strandwitz signed the MOU on behalf of Plexus.

Strategy and Business Development, regarding jointly patenting the Device. The letter stated, in part:

> Pursuant to the meeting yesterday, I am writing this letter to confirm that it now appears to make good sense to investigate patent protection on various elements of the Device. As we have moved forward conceptually and with the demonstration unit, there is a growing belief that there are patentable elements relative to the Device. We agree that any patents would be jointly owned by Motorola and our team's "funding entity", and that it would make good sense to have Motorola head up the patent investigation.

Ex. 37 to Motorola's Statement of Facts. The letter also included a "Draft for Discussion Only" document stating that any patents and other intellectual property rights that the parties jointly developed would be jointly owned by Motorola and Memorylink. *Id.*

The "funding entity" referred to in Strandwitz's letter was Memorylink, a company created by Strandwitz and Kniskern to serve as a funding and coordinating entity to create wireless video products and technology. Strandwitz was the original investor in Memorylink, and served as CEO and Chairman of the Memorylink board. Kniskern became the President of Memorylink, and was a board member. Memorylink was incorporated on January 28, 1998, and Strandwitz immediately followed up with another letter to Waltz informing him that Memorylink had officially been incorporated and stating that:

> The Memorylink arrangement should simplify matters moving forward. As you and I discussed, any patents relating to the Device would be jointly owned by Motorola and Memorylink.

Ex. 13 to Motorola's Statement of Facts. Strandwitz copied Kniskern on his January 28, 1998 letter.

Over the next month, the parties developed three new circuit boards for use in the Device. Motorola developed a radio board and a control logic board and Memorylink developed a video compression board. Each of these components was necessary to transmit wireless video and each

was installed in the Sharp camcorders. The Motorola control logic board implemented a control feedback mechanism that interfaced between the video compression engine and the radio. Memorylink claims that Kniskern and Strandwitz had conceived of this feedback mechanism and that they understood that it would be part of the Device before they met with Motorola. On February 25, 1998, Strandwitz and Kniskern demonstrated the wireless video system using the Sharp camcorder at Motorola's offices.

Thereafter, the parties intensified their efforts to patent the Device. On April 13, 1998, Hugh Dunlop, a member of Motorola's in-house legal department,[4] sent Strandwitz a letter proposing "that Motorola and MemoryLink enter into an agreement under which one or more joint patent applications are filed." Ex. 42 to Motorola's Statement of Facts. Dunlop's letter also said "[i]t is my understanding from Gary Schultz and Jan Wyckoff that the inventors for these ideas are yourself, Gary, Jan, and Bob Kniskern. Please let me know if you or Bob disagree with this determination of inventorship." *Id.* Strandwitz and Kniskern reviewed Dunlop's letter and did not disagree with his determination of inventorship.[5] On April 21, 1998, Strandwitz and Kniskern met with Schultz and Wyckoff, and each individual signed an invention disclosure form that listed Strandwitz, Kniskern, Wyckoff, and Schulz as joint inventors of the Device. Ex. 44 to Motorola's Statement of Facts. Later, on June 22, 1998, Motorola submitted the patent application for the Device (which became the '352 Patent). The patent application listed

[4] Memorylink asserts that Dunlop also served as counsel for Strandwitz, Kniskern, and Memorylink with respect to their intellectual property claims.

[5] Memorylink claims that Strandwitz and Kniskern did not disagree with Dunlop because Dunlop "was their lawyer," because neither Strandwitz nor Kniskern "had a proper understanding of what 'inventorship' was in order to be properly named on a patent," and because "Strandwitz was informed that Motorola's employees needed to be on the patent." Memorylink Resp. to Motorola Statement of Fact ¶ 48.

Strandwitz, Kniskern, Wyckoff, and Schultz as inventors. Motorola prepared, paid the fees for, and prosecuted the '352 patent.

Each of the inventors listed on the '352 Patent entered into a contract to assign their intellectual property rights jointly to Motorola and Memorylink. The assignment agreement states:

> For and in consideration of the sum of One Dollar to us in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, we [Strandwitz, Kniskern, Schulz, and Wyckoff] have sold, assigned and transferred, and do hereby sell, assign and transfer unto [Motorola and Memorylink] . . . the entire right, title and interest [to the '352 Patent].

Ex. 48 to Motorola's Statement of Facts. Kniskern and Strandwitz signed the assignment on June 12 and 13, 1998, respectively, and Schulz and Wyckoff signed it on June 22, 1998.

On June 24, 1998, two days after applying for the '352 Patent, Motorola demonstrated the Device, using wireless camcorders, for Sony. Strandwitz and Kniskern did not attend the Sony demonstration and did not know that it would be occurring, but they were aware that Motorola intended to perform a demonstration for Sony because Motorola had asked them to modify Sony camcorders for the demonstration. Motorola did not require Sony to sign a non-disclosure agreement prior to the demonstration, but Motorola claims that it "diluted" the demonstration so as not to reveal the underlying technology or other confidential information.

Also on June 24, 1998, Motorola filed a second patent application (which was later granted as the '938 Patent) without informing Memorylink and without Memorylink's knowledge or agreement. The '938 Patent depicts two video camcorders with the ability to transmit video via removable modems placed in the camcorders' storage modules. Motorola listed only Schulz and Wyckoff as the "inventors" of the '938 Patent.

The U.S. Patent and Trademark Office later granted the patent applications and issued the '352 Patent on February 18, 2003 and the '938 Patent on June 3, 2003. Memorylink alleges that on November 29, 2007, it for the first time learned from its attorneys that Schulz and Wyckoff were not proper co-inventors, and should not have been listed as such on the '352 Patent. Shortly thereafter, Memorylink learned for the first time of the existence of the '938 Patent.

Memorylink filed its original complaint, which listed twenty separate claims against Motorola, on June 9, 2008. Memorylink later filed two amended complaints revising certain counts and adding an additional six counts for a total of twenty-six counts. This case originally proceeded in this district before Judge Hibbler, who dismissed many of Memorylink's claims on Motorola's motion to dismiss. In their reassignment status report, the parties provided the following helpful chart detailing which claims remain and which have been dismissed.

Count	Claim	'352 Patent	'938 Patent
I	Correction of Inventorship	✓	N/A
II	Assignment of '352 Patent is Invalid due to Fraud	Dismissed	N/A
III	Assignment of '352 Patent is Void for Lack of Consideration	✓	N/A
IV	Infringement of '352 Patent	✓	N/A
V	Correction of Inventorship	N/A	✓
VI	Breach of Non-Disclosure Agreements	✓*	
VII	Breach of Fiduciary Duty	Dismissed	✓
VIII	Common Law Fraud	Dismissed	✓
IX	Promissory Fraud	Dismissed	Dismissed
X	Negligent Misrepresentation	Dismissed	Dismissed
XI	Conversion	Dismissed	✓
XII	Tortious Interference	Dismissed	✓
XIII-XV	Various claims	Dismissed	N/A
XVII-XX	Amended as Counts XXIII-XXVI	Dismissed	Dismissed
XXI	Breach of Contract	✓*	
XXII	Promissory Fraud (Amended from Count IX)	N/A	✓
XXIII	Conversion of '938 Patent (In the Alternative)	N/A	✓
XXIV	Common Law Fraud regarding '938 Patent (In the Alternative)	N/A	✓
XXV	Conversion of '938 Patent (In the Alternative)	N/A	✓
XXVI	Common Law Fraud regarding '938 Patent (In the Alternative)	N/A	✓

* Counts VI and XXI are not patent-specific

The parties have taken extensive discovery, and Motorola now moves for summary judgment in its favor on all of Memorylink's remaining claims.

DISCUSSION

I. Consideration Supported Assignment of the '352 Patent.

The parties first dispute whether adequate consideration supported Strandwitz and Kniskern's transfer of their intellectual property rights to Motorola and Memorylink. The assignment agreement contains a form recitation of consideration, stating that Strandwitz and Kniskern assigned their intellectual property rights "[f]or and in consideration of the sum of One Dollar to us in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged." Memorylink now challenges that recitation, however, claiming that the "other good and valuable consideration" that they were to have received was Schulz and Wyckoff's reciprocal grant of their ownership of the '352 Patent to Memorylink. According to Memorylink, Schulz and Wyckoff were not true inventors of the '352 Patent, and therefore they had no ownership interest to grant. Thus, Memorylink argues, Strandwitz and Kniskern did not actually receive *anything* in exchange for giving up their rights to the '352 Patent.

Motorola, on the other hand, argues that Memorylink is bound by the contractual acknowledgments of the adequacy of consideration and that, in any event, undisputed evidence shows that Strandwitz and Kniskern received legally valid consideration in exchange for the assignment of their rights. Motorola claims that Strandwitz and Kniskern received at least the following in exchange for their assignment of rights: continued employment benefits from

Memorylink, Plexus, and Adaptive;[6] patent prosecution resources; technical and engineering support; and business opportunities.

Motorola, as the party relying on the assignment agreement, bears the burden of proving adequate consideration. *Serpe v. Williams*, 776 F. Supp. 1285, 1288 (N.D. Ill. 1991).[7] Consideration is the "bargained for exchange of promises or performances, and may consist of a promise, an act, or a forbearance." *Carter v. SSC Odin Operating Co., LLC*, 2012 IL 11324 ¶ 23, 976 N.E.2d 344, 352 (quoting *McInerney v. Charter Golf, Inc.*, 176 Ill.2d 482, 487, 680 N.E.2d 1347, 1350 (Ill. 1997)). "Any act or promise which is of benefit to one party or disadvantage to the other is a sufficient consideration to support a contract." *Id.* Courts should "not inquire into the adequacy of consideration to support a contract." *Id.* ¶ 24.

A. Parol Evidence

Curiously, in view of Motorola's argument that the adequacy of consideration for the assignment is acknowledged on the face of those documents, Memorylink argues that the Court should *not* consider parol evidence in deciding whether Strandwitz and Kniskern received consideration in exchange for the assignment of their intellectual property rights. Resp. Br. (Dkt.

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[6] Motorola correctly asserts that Strandwitz and Kniskern could have received valid consideration from an entity other than Motorola itself. *See* Restatement (Second) of Contracts § 71(4) (consideration "may be given by the promisee or some other person"). Memorylink does not dispute that valid consideration could have come from an entity other than Motorola.

[7] The assignment contract does not contain a choice of law provision, but both Memorylink and Motorola invoke Illinois law. Motorola MSJ Br. (Dkt. 314) at 15 (Motorola invoking Illinois law); Memorylink Resp. Br. (Dkt. 329) at 5-6 (Memorylink invoking Illinois contract law). And Judge Hibbler previously applied Illinois law to Memorylink's claim that the assignment lacked consideration. *Memorylink Corp. v. Motorola, Inc.*, No. 08 C 3301, 2009 WL 464338, *6 n. 1 (N.D. Ill. Feb. 23, 2009). To determine what state's substantive law applies to the assignment agreement, we employ a "most significant contacts" test. *Jupiter Aluminum Corp. v. Home Ins. Co.*, 225 F.3d 868, 873 (7th Cir. 2000). Because neither party has given any reason to doubt that Illinois has the most significant contacts with the assignment, and because both parties invoke Illinois law, the Court will apply Illinois substantive law to interpret the assignment.

329) at 16-17. If the Court confines itself to the four corners of the assignment agreement, it must find that Strandwitz and Kniskern *did* receive consideration. The agreement itself unambiguously says that they received "consideration in the sum of One Dollar . . . in hand paid, and other good and valuable consideration." Memorylink argues that the consideration for the assignment was the exchange of patent rights, but there is no such statement in the assignment itself, so absent parol evidence that argument must be rejected. Moreover, Memorylink's argument that parol evidence must be excluded undercuts its position that the assignment was invalid due to a failure of consideration as that is a ground that is ordinarily invoked to *permit* the introduction of parol evidence. *See O'Brien v. Cacciatore*, 227 Ill. App. 3d 836, 845, 591 N.E.2d 1384, 1390 (1st Dist. 1992). Curious though its argument may be, Memorylink has eschewed reliance on parol evidence and on that basis alone its argument that there was inadequate consideration to support the assignment must be rejected. *Laborers' Int'l Union of N. Am. v. Caruso*, 197 F.3d 1195, 1197 (7th Cir. 1999) ("We have long refused to consider arguments that were not presented to the district court in response to summary judgment motions.").

B. Schulz and Wyckoff Transferred Their Interest in the '352 Patent.

Even if Memorylink had not disavowed any reliance on parol evidence, and putting aside the question of whether Strandwitz and Kniskern actually received the $1 consideration payment recited in the contract,[8] there is no question that they received other valid, and much more substantial, consideration. In fact, Strandwitz and Kniskern received exactly the consideration that they acknowledge they bargained for: Schulz and Wyckoff's agreement to assign their

[8] Strandwitz and Kniskern's declarations state that neither of them received any portion of the "One Dollar" recited in the assignment, nor other consideration. If the Court were to accept parol evidence on this issue, there would be a disputed question of fact as to whether Strandwitz and Kniskern received consideration of $1 as described in the assignment agreement.

intellectual property rights to Memorylink. Memorylink now argues that Schulz and Wyckoff were not properly listed as inventors of the '352 Patent, and therefore that they had no valid intellectual property rights to assign. But the fact remains that Schulz and Wyckoff did assign whatever rights they possessed, and that assignment is valid consideration *even if* it turns out that they should not have been listed as inventors of the '352 Patent. At the time of their assignment, Schulz and Wyckoff at the very least had some basis to claim ownership of the '352 Patent, and their agreement to assign away any ownership claims, however uncertain, constituted consideration. Further, Strandwitz and Kniskern were in a good position to know whether Schulz and Wyckoff had a colorable claim to be co-inventors of the '352 Patent—they knew exactly what Schulz and Wyckoff had and had not done in developing the Device. They apparently believed that the Schulz and Wyckoff did have valuable inventorship claims. Whether Strandwitz and Kniskern were mistaken about the strength of those claims is, for this reason, beside the point.

Consideration does not fail merely because the property transferred from one party to another, though it originally appeared to be valuable, turns out to be worthless. *See Fed. Deposit Ins. Corp. v. Lauterbach*, 626 F.2d 1327, 1339 (7th Cir. 1980) (applying Wisconsin law); *Lindy Lu LLC v. Illinois Cent. R.R. Co.*, 2013 IL App (3d) 120337 at ¶¶ 23-24, 984 N.E.2d 1171, 1176 ("The purchaser of a quitclaim deed may not recover the money he paid or allege a failure of consideration . . . even if the grantor has not title to the property."); *see also* 3 R. Lord, Williston on Contracts § 7:21 (4th ed. 2013) ("most courts, even today, would follow the rule that surrender of a paper, though it turns out factually to be valueless, can serve as consideration for a promise, so long as there is some possibility, though dubious or completely uncertain, that it might have at least some value"). That Schulz and Wyckoff's claim to ownership of the '352

Patent was uncertain—and might eventually be found to be meritless—does not void the contract for lack of consideration. *See Apfel v. Prudential-Bache Sec. Inc.*, 81 N.Y.2d 470, 476, 616 N.E.2d 1095, 1097 (N.Y. 1993) ("The fact that the sellers may not have had a property right in what they sold does not, by itself, render the contract void for lack of consideration.").

At a minimum, Schulz and Wyckoff's ownership of the intellectual property is analogous to a disputed claim that may prove invalid.[9] The Restatement makes clear that the surrender of a claim "which proves to be invalid" is not consideration unless "(a) the claim . . . is in fact doubtful because of uncertainty as to the facts or the law, or (b) the . . . surrendering party believes that the claim or defense may fairly be determined to be valid." Restatement (Second) of Contracts § 74(1). In other words, Schulz and Wyckoff's assignment constituted valid consideration unless the Court finds that their claim to inventorship of the '352 patent was clearly invalid *and* that they did not believe that their inventorship claim might be valid. The Court cannot make either finding.

First, that Schulz and Wyckoff's inventorship claim "is in fact doubtful" is apparent from the fact that the issue is still being litigated 15 years after the parties filed the patent application. Memorylink admits that Schulz and Wyckoff provided some contribution to the '352 Patent, but it disputes whether that contribution was significant enough to result in inventorship. Schulz and Wyckoff, then, had at least an arguable claim to intellectual property rights at the time of the assignment. Second, there is significant evidence that Schulz and Wyckoff believed (and still believe) that they were properly co-inventors of the '352 Patent. They have each testified that they considered themselves to be inventors of the patent, Schulz Dep. at 250 (explaining that the

[9] At the time of the assignment, of course, no one disputed Schulz and Wyckoff's ownership of the '352 Patent rights.

group decided that Schulz and Wyckoff were among the inventors of the '352 Patent); Wyckoff Dep. at 191 (describing parts of '352 Patent that he invented), and Memorylink has presented no evidence that Schulz and Wyckoff did not consider themselves to be inventors of the '352 Patent. Therefore, because Schulz and Wyckoff's claim to ownership of the '352 Patent intellectual property rights was (at least) doubtful and they believed that their claim might be valid, their assignment of these rights was valid consideration for Strandwitz and Kniskern's contemporaneous assignment to Motorola.

C. Strandwitz and Kniskern Received Patent Prosecution Resources.

Strandwitz and Kniskern also bargained for and received patent prosecution resources in exchange for their assignment of the '352 Patent to Motorola. There is no dispute that Motorola drafted the '352 Patent specification and claims, paid all fees associated with the patent filing, and continued to prosecute the patent application after it was filed. The provision of patent prosecution resources can constitute consideration for the assignment of patent rights. *See Schwendimann v. Arkwright Advanced Coating, Inc.*, No. 11 C 820, 2012 WL 3288487, *6-7 (D. Minn. Aug. 10, 2012). Memorylink argues that Strandwitz and Kniskern did not bargain for Motorola's patent prosecution resources, but the undisputed evidence shows that they did. On January 21, 1998, Strandwitz sent a letter to Waltz of Motorola to discuss patenting their project that stated:

> We agree that any patents would be jointly owned by Motorola and our team's "funding entity" [Memorylink], and that it would make good sense to have Motorola head up the patent investigation.

Ex. 37 to Motorola's Statement of Facts. In other words, Strandwitz offered to give joint patent ownership to Motorola, and asked for Motorola to prosecute the patent. That is classic

"bargained for" consideration, and it provides an independent basis for rejecting Memorylink's argument that the assignment fails for lack of consideration.

Because the undisputed facts reveal that Strandwitz and Kniskern received consideration for their agreement to assign their ownership of the '352 Patent to Motorola and Memorylink, Motorola's motion for summary judgment is granted as to Count III. That means that Motorola has been a joint owner of the '352 Patent at all relevant times. As Judge Hibbler stated earlier in this litigation, "[i]t is axiomatic that a joint owner of a patent cannot be liable for infringement." *Memorylink Corp. v. Motorola, Inc.*, 2009 WL 464338 at *9; *see also* 35 U.S.C. § 262. Therefore, Motorola is also entitled to summary judgment on Count IV, Memorylink's claim that Motorola infringed the '352 Patent.

II. The Claim for Correction of Inventorship of the '352 Patent Survives Because Motorola Has Not Shown Prejudice from Memorylink's Delay.

Motorola next moves for summary judgment as to Count I of the complaint, arguing that Memorylink's claim for correction of inventorship is barred by laches and equitable estoppel. As a practical matter, because the Court has already ruled in Motorola's favor on the '352 Patent infringement claim, Memorylink may have no economic incentive to maintain this claim. However, the claim is not moot because 35 U.S.C. § 256, under which Memorylink brings its claim, applies broadly whenever a party seeks to correct inventorship for its own benefit or to serve "the public interest of assuring correct inventorship designations on patents." *Chou v. Univ. of Chicago*, 254 F.3d 1347, 1358 (Fed. Cir. 2001). Because correcting the inventorship of the patent constitutes a remedy of its own, the claim is not moot, and the Court will consider it.

A rebuttable presumption of laches applies to a correction of inventorship claim where a plaintiff delays filing suit for more than six years after knowledge of the facts underlying its

claim. *Serdarevic v. Advanced Med. Optics, Inc.*, 532 F.3d 1352, 1358 (Fed. Cir. 2008). "[T]he laches period for a § 256 correction of inventorship claim begins to run when the . . . inventor knew or should have known of the issuance of the patent, regardless of whether the . . . inventor knew or should have known of the [allegedly incorrect] inventorship while the patent application was pending before the PTO." *Hor v. Chu*, 699 F.3d 1331, 1336-37 (Fed. Cir. 2012) (internal quotation marks omitted).[10] The '352 Patent was issued on February 18, 2003, and Memorylink filed suit on June 9, 2008, a delay of nearly five and a half years. Though Memorylink's delay was significant, it does not meet the six year requirement for the presumption of laches to apply.

Even without the presumption of laches, Motorola may still argue that laches applies. Dismissal of a claim on the ground of laches is appropriate only where there is "(1) unreasonable and unexcused delay in bringing the claim, and (2) material prejudice to the defendant as a result of the delay." *Advanced Cardiovascular Sys., Inc. v. Scimed Life Sys., Inc.*, 988 F.2d 1157, 1161 (Fed. Cir. 1993). Here, Memorylink waited over five years from when its correction of inventorship claim arose until filing its complaint. Memorylink claims that its delay was reasonable because Motorola and its inside counsel, Dunlop, deliberately misled it into believing that Schulz and Wyckoff were properly named as inventors. Judge Hibbler previously examined and rejected this argument:

> The notion that Memorylink had no suspicions of fraud seem[s] highly suspect given Memorylink's dogged insistence that Motorola's engineers contributed nothing to the patent. In this case, Motorola's purported fraud would be relatively easy to unearth. An individual does not need a law degree to understand that those

[10] The *Hor* opinion was issued after the parties filed their summary judgment briefs, and it settles the legal question the parties' disputed in their briefs as to whether the laches period began in 1998 when Strandwitz and Kniskern knew that Schulz and Wyckoff were named as inventors of the '352 Patent or when the patent was issued in 2003.

> who contribute nothing to an invention are not "required" to be listed as "co-inventors" [on the patent].

Memorylink Corp. v. Motorola, Inc., 2009 WL 464338 at *5. Memorylink's excuse for its delay boils down to its own ignorance of the law of inventorship. But "ignorance of one's legal rights is not a reasonable excuse in a laches case." *Pro-Football, Inc. v. Harjo*, 567 F. Supp. 2d 46, 55 (D.D.C. 2008); *see also Jones v. United States*, 6 Cl. Ct. 531, 532-33 (Cl. Ct. 1984) (rejecting laches defense based on ignorance of the law). Memorylink's delay in pressing its claim is unreasonable and unexcused.

However, Motorola fails to establish the prejudice required to rely on laches. Prejudice can be evidentiary or economic. Evidentiary prejudice "may arise by reason of a defendant's inability to present a full and fair defense on the merits due to the loss of records, the death of a witness, or the unreliability of memories of long past events, thereby undermining the court's ability to judge the facts." *A.C. Aukerman Co. v. R.L. Chaides Constr. Co.*, 960 F.2d 1020, 1033 (Fed. Cir. 1992). Motorola argues that in their depositions, Strandwitz, Kniskern, and Wyckoff could not remember specific details about what had happened at the time of the invention, nearly fifteen years earlier. But the details that the witnesses cannot remember do not appear to be crucial to deciding inventorship. For example, Strandwitz cannot remember who attended the meeting at which Memorylink and Motorola decided to add Schulz and Wyckoff to the '352 Patent, but that detail is completely irrelevant to the question whether Schulz and Wyckoff were properly named as inventors. Similarly, Kniskern does not recall whether he worked with Schulz and Wyckoff in preparing the patent application itself, nor does he recall when Motorola first sent him information about the radio boards it planned to supply. Wyckoff does not remember the date on which he conceived of the Device covered in the '352 Patent, when Motorola sent the

radio board specifications, or what was said at the time that the parties decided that Schulz and Wyckoff would be named as inventors.[11] None of those details are directly material to the inventorship question. And the documents that Motorola has identified as missing—such as a signed copy of the Joint Patent Filing Agreement[12]—also do not appear to directly impact the inventorship question. Though time has surely dulled the witnesses' memories, Motorola has not established that it will be unable "to present a full and fair defense" to Memorylink's inventorship claim, nor that it has suffered material evidentiary prejudice by reason of the delay. *Aukerman*, 960 F.2d at 1033.

Nor has Motorola established economic prejudice. It claims that its legal department incurred patent prosecution costs because of Memorylink's delay, but most of Motorola's patent prosecution costs were likely incurred prior to the inception of Memorylink's claim, which did not occur until after the USPTO issued the '352 Patent. And because Motorola is a joint owner of the patent due to the inventors' assignment, it incurred patent prosecution costs not because of Memorylink's delay, but rather in order to protect its own economic interests. Therefore, Motorola cannot establish prejudice from Memorylink's delay, and its argument that Memorylink's correction of invention claim is barred by laches fails.

Motorola's equitable estoppel defense fails for the same reason as its laches claim: lack of prejudice. *See DSM Desotech, Inc. v. 3D Sys. Corp.*, 900 F.Supp.2d 783, 792 (N.D. Ill. 2012)

[11] Wyckoff also testified that he could not "remember all of the details" of what he did to design the Device, but he was able to give a thorough description of his contributions. Wyckoff Dep. at 207-08.

[12] An unsigned copy of this agreement has been located and produced.

("The element of material prejudice for laches is the same as for equitable estoppel."). Therefore, Motorola's motion for summary judgment is denied as to Count I.

III. Summary Judgment is Appropriate on Memorylink's Correction of Inventorship of the '938 Patent.

Memorylink's remaining claims all relate to the second patent, known as the '938 Patent, which listed Schulz and Wyckoff as inventors. Memorylink first claims that, pursuant to 35 U.S.C. § 256, inventorship should be corrected to show that Strandwitz and Kniskern were the true inventors of the patent. After all reasonable inferences are drawn in its favor, Memorylink bears the burden of showing by clear and convincing evidence that Strandwitz and Kniskern were inventors of the '938 Patent. *Stern v. Trustees of Columbia Univ. in the City of New York*, 434 F.3d 1375, 1377 (Fed. Cir. 2006). But it presents no evidence to show that Strandwitz and Kniskern invented the actual technology described in the '938 Patent, instead merely arguing that they came up with the idea of using a camcorder to wirelessly transmit and receive video. Further, Strandwitz and Kniskern both admit that they did not invent the technology described in the '938 Patent.

The '938 Patent describes the invention as a "self-contained camera device and method for capturing and communicating images via a modem." The modem discussed in the '938 Patent was to be the "same shape and size as a magnetic cassette tape" such that it can be inserted and removed from the tape deck of a standard camcorder. The patent repeatedly emphasizes that data would be transmitted by modem.

When Motorola questioned Strandwitz and Kniskern about whether they had invented a device that would transmit data wirelessly by use of a modem shaped like a cassette tape, they denied inventing such a device, and even questioned why a modem would be used in that

manner. *See* Strandwitz Dep. at 232 ("I don't know why you would do that with a modem"); 236 ("I wouldn't . . . be able to say I thought of coming up with a modem to fit in a drive like that"); 237 ("I guess I don't consider that an invention very much."); Kniskern Dep. at 299 (Q: "Did you have discussions with anyone in the 1997, 1998 time frame of the concept of a removable modem that can be inserted into a camera's tape slot?" A: "No."). That the supposed inventors themselves admit that they did not conceive of a device that would work like the '938 Patent is fatal to Memorylink's claim.

Memorylink protests, however, that Strandwitz and Kniskern conceived of converting standard camcorders to allow them to transmit and receive signals. They would presumably argue that the '938 Patent falls within that general class of devices. But that does not mean that they invented the device actually described in the '938 Patent—and Strandwitz and Kniskern admit that they did not. At best, Strandwitz and Kniskern might conceivably have had a potential claim that the '938 Patent should be invalidated because it is an obvious or non-novel application of their pre-existing idea that cameras could wirelessly transmit data. *See Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 149-50 (1989) (describing requirement in patent law that "an innovation not be anticipated by the prior art in the field" and stating that an invention "will not qualify for federal patent protection if its contours are so traced by the existing technology in the field that the improvement is the work of the skillful mechanic, not that of the inventor") (internal quotation marks omitted). But Memorylink has not advanced a claim to invalidate the '938 Patent.[13]

[13] And in any case, it is far from clear that such a claim would have any merit.

Because Strandwitz and Kniskern admit that they were not inventors of the '938 Patent, summary judgment is granted to Motorola on Count V.

IV. Memorylink's State Law Claims Relating to the '938 Patent Also Fail.

Counts VII, VIII, XI, XXII, XXIII, XXIV, XXV, and XXVI of Memorylink's complaint are all state law claims that depend on a finding that Memorylink is the owner of the '938 Patent. Because the Court has already determined that Strandwitz and Kniskern did not invent the '938 Patent, Memorylink therefore has no ownership interest in the '938 Patent. Accordingly, summary judgment is appropriate on each of these counts. Since Strandwitz and Kniskern were not inventors of the '938 Patent, Motorola did not fraudulently obtain their idea (Counts VIII, XXII, XXIV, XXVI) nor breach any fiduciary duty in obtaining the idea (Count VII), and Memorylink cannot maintain a claim that Motorola converted the idea (Counts XI, XXIII, XXV).

V. Motorola is Entitled to Summary Judgment on Memorylink's Breach of Contract Claims.

Memorylink's breach of contract claims also fail to survive summary judgment. First, Memorylink alleges that Motorola breached the NDA by sharing certain confidential information with Sony in 1998. However, Memorylink is not a party to the NDA. Rather, on December 26, 1997, Motorola entered into the NDA with Adaptive, and the terms of the NDA explicitly state that it "may not be assigned by either party without the prior written consent of the other." Memorylink argues that "the parties ratified, by their conduct," an assignment of the NDA to Memorylink because Motorola would not have shared its radio technology with Memorylink or allowed Memorylink to keep the radio board unless it understood that the NDA prevented Memorylink from disclosing that technology. But that argument is woefully inadequate to

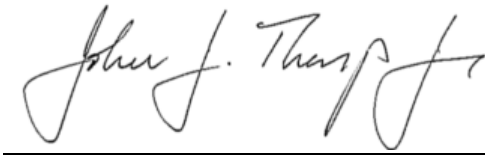
establish that the NDA was assigned, especially because the NDA requires all assignments to be in writing. The mere fact that Motorola sent certain technology to Memorylink cannot establish that Motorola acquiesced to an assignment of the NDA through a course of conduct consistent with acceptance. If merely sending sensitive technology to an outside party was sufficient to establish confidentiality obligations then Motorola would have no need of non-disclosure agreements at all. Further, Memorylink admitted in its statement of additional facts that there was no non-disclosure agreement between itself and Motorola. Dkt. 330 ¶ 52. Because Memorylink has failed to present evidence showing that it was a party to the NDA, Motorola's motion for summary judgment is granted as to Count VI.

Finally, Memorylink alleges that Motorola violated the MOU by obtaining intellectual property rights to the technology covered by the '352 Patent and the '938 Patent. Memorylink claims that Motorola violated the portion of the MOU that states that '[e]ach party will retain all rights to its own concepts and technology, including the right to transfer or license its own concepts and technology." Dkt. 1-4 ¶ 5. But, as explained above, Strandwitz and Kniskern assigned their intellectual property rights in the '352 Patent to Motorola (along with Memorylink), and Memorylink has presented no evidence to show that it developed the idea for the technology covered by the '938 Patent. Therefore, it is clear that Motorola did not violate the MOU, and it is entitled to summary judgment on Count XXI.

* * *

For the reasons set forth above, Motorola's motion for summary judgment is granted on all claims except for Count I.

Entered: August 15, 2013



John J. Tharp, Jr.
United States District Judge

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

MEMORYLINK CORPORATION	)	
	)	
Plaintiff,	)	
	)	No. 08 C 03301
v.	)	
	)	Judge John J. Tharp, Jr.
MOTOROLA SOLUTIONS, INC. and MOTOROLA MOBILITY, INC.	)	
	)	
Defendants.	)	

ORDER

For the reasons explained in the Statement below, the Court grants Memorylink's motion for certification of final judgment pursuant to Fed. R. Civ. P. 54(b) [359]. Because all claims except for Count I, seeking correction of inventorship on the '352 Patent, have been fully adjudicated and resolved, and because the Court expressly finds that there is no just reason for delay, the Court will enter final judgment as to Counts II through XXVI.

STATEMENT

This dispute involves two disputed patents and over two dozen counts seeking relief under various legal theories; all that remains now, however, is Count I of the Amended Complaint. In that count, plaintiff Memorylink seeks to correct the inventors listed on one of the patents, limiting the list to Memorylink's principals, Peter Strandwitz and Robert Kniskem, and removing the two listed inventors from Motorola. *See* 35 U.S.C. § 256(a). As Memorylink now can hope only to correct the inventorship designation on the '352 patent (absent a successful appeal), this Court noted in its prior opinion that "Memorylink may have no economic inventive to maintain this claim" now that Motorola has prevailed, independently of the dispute over inventorship, on every theory that would entitle plaintiff to damages. *See* Mem. Op., Dkt # 357 at 14. Instead of proceeding to trial on the inventorship claim, Memorylink moves this Court to certify for immediate appeal the rulings disposing of the 25 other counts, including infringement, fraud, and contract claims. Many of these were dismissed as untimely on Motorola's motion in Judge Hibbler's February 2009 opinion (Dkt # 59); and this Court granted summary judgment for Motorola on all remaining claims, except inventorship, on August 15, 2013 (Dkt. # 357). Motorola opposes the motion.

Federal Rule of Civil Procedure 54(b) provides in relevant part that in a multi-claim action, "the court may direct entry of a final judgment as to one or more, but fewer than all, claims or parties only if the court expressly determines that there is no just reason for delay." In patent cases, "Federal Circuit law applies to Rule 54(b) certification and appellate jurisdiction issues." *State Contracting & Engineering Corp. v. State of Florida*, 258 F.3d 1329, 1334 (Fed.

Cir. 2001). Rule 54(b) provides an exception to the general rule that orders resolving fewer than all the claims in a case are not final for purposes of appellate review under 28 U.S.C. § 1295—the patent-dispute equivalent of 28 U.S.C. § 1291. *See Nystrom v. TREX Co., Inc*., 339 F.3d 1347, 1350 (Fed. Cir. 2003). Certification under Rule 54(b) is appropriate where (1) "the judgment is final with respect to one or more claims"; and (2) "there [is] no just reason for delay" of an immediate appeal. *Houston Indus. Inc. v. United States*, 78 F.3d 564, 567 (Fed. Cir. 1996).

Here, the parties do not dispute, and this Court agrees, that Memorylink is seeking to appeal rulings that are final. "A judgment is final for Rule 54(b) purposes when it is 'an ultimate disposition of an individual claim entered in the course of a multiple claims action.'" *Houston Indus. Inc*., 78 F.3d at 567 (citing *Sears, Roebuck & Co. v. Mackey*, 351 U.S. 427, 436 (1956)). Both the dismissal of some claims and the grant of summary judgment on others are final dispositions at the trial level; the claims were finally adjudicated, and this Court has nothing left to do with them.

Therefore, the only question is whether there is "no just reason to delay." One factor to consider is the separateness of the remaining claims from those to be immediately appealed. *W.L. Gore & Assocs., Inc. v. Int'l Medical Prosthetics Research Assocs., Inc*., 975 F.2d 858, 862 (Fed. Cir. 1992) (citing *Curtiss-Wright Corp. v. General Elec. Co*., 446 U.S. 1, 8 (1980)). The appellate court should not be presented with the same issues more than once even if there are subsequent appeals. *See Curtiss-Wright*, 446 U.S. at 8; *see also Lottie v. West American Ins. Co. of Ohio Cas. Group of Ins. Cos*., 408 F.3d 935, 938 (7th Cir. 2005) (appellate court "insist[s]" that the district courts employ Rule 54(b) "only when the subjects of the partial judgment do not overlap with those remaining in the district court"). However, "[e]ven for claims that arise out of the same transaction or occurrence, sound case management may warrant entry of partial final judgment," and "[d]istrict courts have substantial discretion in determining when there is no just cause for delay in entering judgment under Rule 54(b)." *Intergraph Corp. v. Intel Corp*., 253 F.3d 695, 699 (Fed. Cir. 2001).

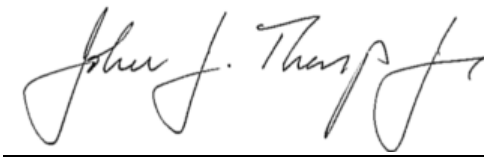
Motorola contends that the inventorship claim is so interrelated with the others that it cannot be separated. It overstates the case; although broadly speaking all of Memorylink's claims stem from the same underlying occurrence, the appellate court would not be called upon to review factual findings relating to inventorship—none have yet been made in this Court—that would then have to be revisited in a future appeal. And the resolution of every other claim without a ruling on the inventorship claim shows that it is not inextricable, factually or legally, from the rest. Whatever overlap exists between the inventorship claim and the claims to be immediately appealed is not sufficient to prevent the Rule 54(b) certification. *See W.L. Gore*, 975 F.2d at 864.

Furthermore, entry of final judgment could ward off a claim construction proceeding and trial of the inventorship claim. *See Intergraph Corp*., 253 F.3d at 699. If this Court's rulings are affirmed on appeal, Memorylink will not pursue the inventorship claim at all (its motion so represents), and the case will be over. If this Court is reversed, then any revived claims can be tried along with the inventorship claim in a single proceeding. On the other hand, proceeding now on Count I would require a claim construction hearing—*see, e.g*., Joint Claim Construction

Chart, Dkt. # 232 (Count 1 requires up to five constructions)—and a trial on inventorship, neither of which would be necessary if this Court were affirmed on appeal. Motorola contends that trial of the inventorship claim would be a straightforward matter that would require nothing but a brief bench trial of two to three days, but the Court is quite skeptical of that claim. This case is more than five years old and has been hotly contested at every juncture—including what seemed to the Court to be a noncontroversial proposal to avoid the need for contested briefing on a Rule 54(b) motion,[1] and it is therefore not surprising to read in Memorylink's reply brief that it takes issue with Motorola's description of the work that would be required to go forward on a trial of the inventorship claim. In the Court's estimation, denying Memorylink's motion guarantees the need for both further substantial litigation in this Court and an appeal, while granting the motion presents a significant chance that there will be no need for anything other than an appeal (which will be more narrow than would an appeal after a trial on the inventorship claim).

Motorola also argues that Memorylink should not be permitted to include in an interlocutory appeal claims dismissed by Judge Hibbler on Motorola's motion to dismiss early on in the litigation. Those claims have been awaiting appeal for several years, so Motorola scoffs at the notion that there could be a certification that there is no just reason for delaying the appeal of those claims. But this argument compares apples and oranges. When Judge Hibbler dismissed those counts, there remained myriad counts as to which extensive discovery remained; the appeal of those dismissals did not offer any prospect of resolving the litigation in its entirety. With the dismissal of every other claim save the inventorship claim, however, the landscape has changed materially. Now, delaying appeal would guarantee substantial further litigation relating solely to an issue that, based on this Court's ruling, has no economic value at all. Under these circumstances, the Court has no difficulty in concluding that there is no reason to *further* delay appeal of the counts dismissed by Judge Hibbler.

The Court therefore concludes that the more efficient course, and the one with the greater chance to avert piecemeal litigation, is to allow an immediate appeal of the rulings that either dismissed or granted judgment for Motorola on the vast majority of Memorylink's claims. In other words, it is "in the interest of sound judicial administration" to allow an immediate appeal. *Curtiss-Wright Corp*., 446 U.S. at 1465. Accordingly, the Court expressly determines that there is no just cause for delay in the entry of final judgment on Counts II through XXVI and judgment on those claims, in Motorola's favor, will be entered pursuant to Rule 54(b).



Date: December 3, 2013

John J. Tharp, Jr.
United States District Judge

[1] The point is not that Motorola's opposition to that proposal was unreasonable, but rather that what may seem "straightforward" often is not.

ILND 450 (Rev. 10/13) Judgment in a Civil Action

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

MEMORYLINK CORPORATION

Plaintiff,

v.

MOTOROLA SOLUTIONS, INC. and MOTOROLA MOBILITY, INC.

Defendants.

Case No. 08 C 3301

Judge John J. Tharp, Jr.

JUDGMENT IN A CIVIL CASE

Judgment is hereby entered:

in favor of	defendants Motorola Solutions, Inc. and Motorola Mobility, Inc.;
and against	plaintiff Memorylink Corporation.

This action was:

decided by Judge John J. Tharp, Jr. on a motion for summary judgment, as to Counts III-VI, XXI-XXVI [Dkt. 357], and by Judge William J. Hibbler on a motion to dismiss, as to Counts II, VII-XX [Dkt. 59]. Final judgment is entered on COunts II-XXVI pursuant to Rule 54(b) upon determination by Judge Tharp [Dkt. 365] that the rulings are final and there is no just cause for delay.

Date: 12/3/2013

Thomas G. Bruton, Clerk of Court

Alberta Rone, Deputy Clerk

US006522352B1

(12) **United States Patent**
Strandwitz et al.

(10) **Patent No.: US 6,522,352 B1**
(45) **Date of Patent: Feb. 18, 2003**

(54) **SELF-CONTAINED WIRELESS CAMERA DEVICE, WIRELESS CAMERA SYSTEM AND METHOD**

(75) Inventors: **Peter Strandwitz**, Appleton, WI (US); **Robert Kniskern**, Fort Wayne, IN (US); **Gary D. Schulz**, Cary, IL (US); **Jan-Michael Wyckoff**, Schaumburg, IL (US)

(73) Assignee: **Motorola, Inc.**, Schaumburg, IL (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **09/102,457**

(22) Filed: **Jun. 22, 1998**

(51) **Int. Cl.**[7] **H04N 5/232**
(52) **U.S. Cl.** **348/211.2**; 348/211.4; 348/333.01; 455/556
(58) **Field of Search** 348/207, 211, 348/212, 213, 231, 234, 232, 233, 222, 384, 552, 207.99, 207.1, 207.11, 211.99, 211.1, 211.2, 211.3, 211.4, 211.5, 211.6, 333.01, 333.02, 333.12; 455/556, 557; H04N 5/225

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,097,893 A * 6/1978 Camras 348/158
4,791,680 A * 12/1988 Yokoe et al. 358/1.9
5,760,824 A * 6/1998 Hicks, III 348/14.02
6,327,001 B1 * 12/2001 Yamagishi 348/158
6,330,028 B1 * 12/2001 Oie et al. 348/220

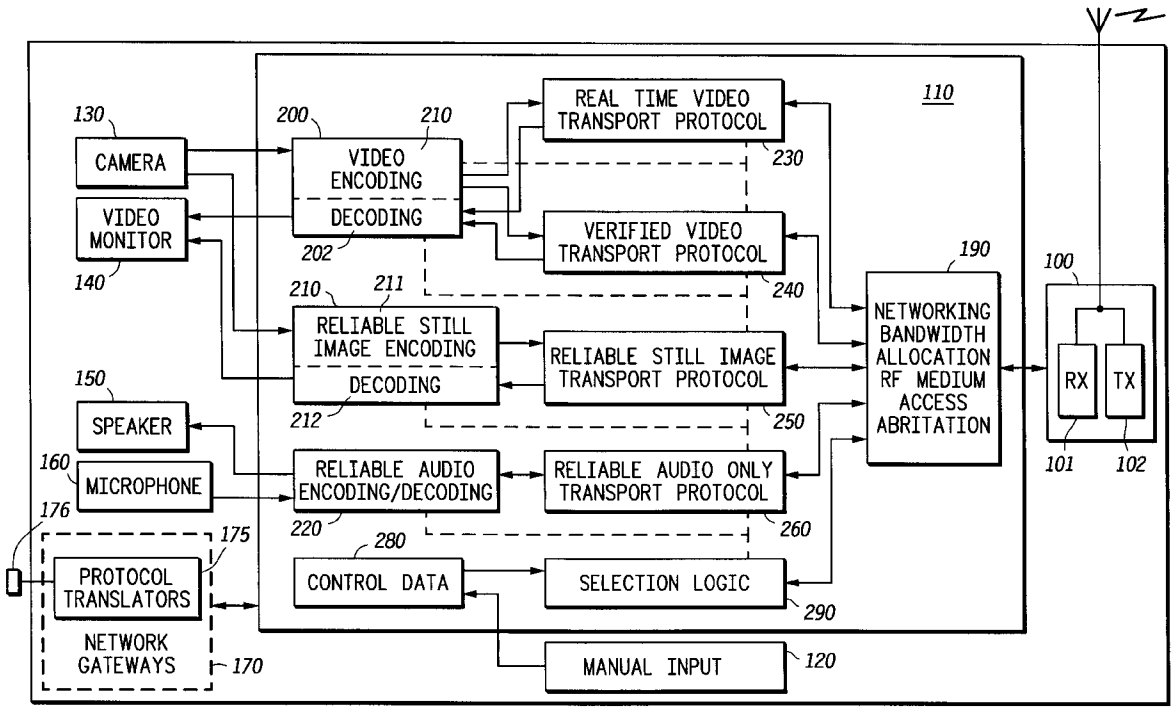
* cited by examiner

Primary Examiner—Tuan Ho
(74) *Attorney, Agent, or Firm*—Hugh C. Dunlop; Brian M. Mancini

(57) **ABSTRACT**

A self-contained wireless camera (**10**) and a wireless camera system (**25**) having such a device and a base station (**20**). Video processing (e.g. video compression) circuitry (**200**, **210**) of the camera device receives video signals from a camera (**130**) and provides processed video signals. These are transmitted over a shared radio channel. A radio receiver (**101**) receives processed (e.g. compressed) video signals from the base station or another camera device. Images from the camera or the base station are displayed in a selected manner on a display or monitor (**140**). The base station device (**20**) receives processed (e.g. compressed) video signals, stores them and retransmits them. A command signal is received by the radio receiver to modify operation in such a manner as to control bandwidth usage. Wireless camera devices can adjust their operation to accommodate other wireless camera devices. Different transport protocol modules **230** and **240** can be selected according to the application that the user selects for operation.

26 Claims, 8 Drawing Sheets



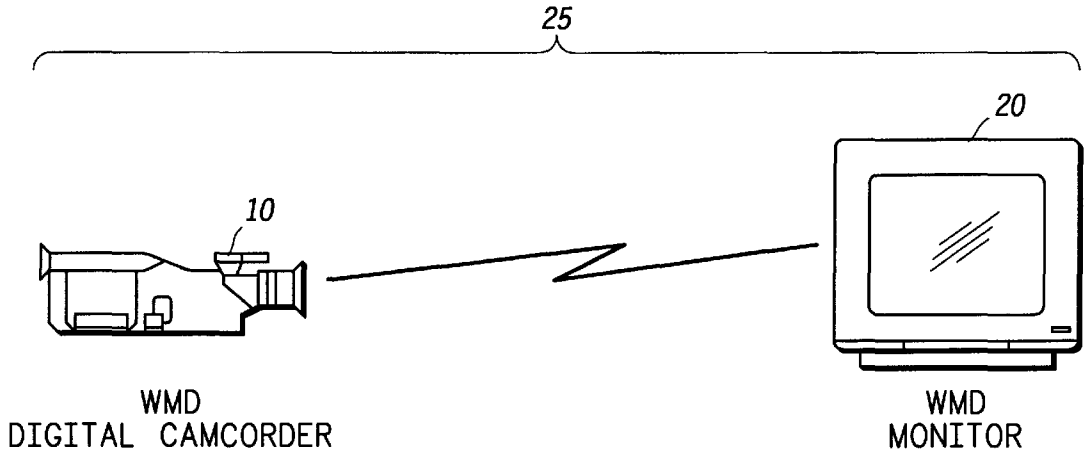


FIG. 1

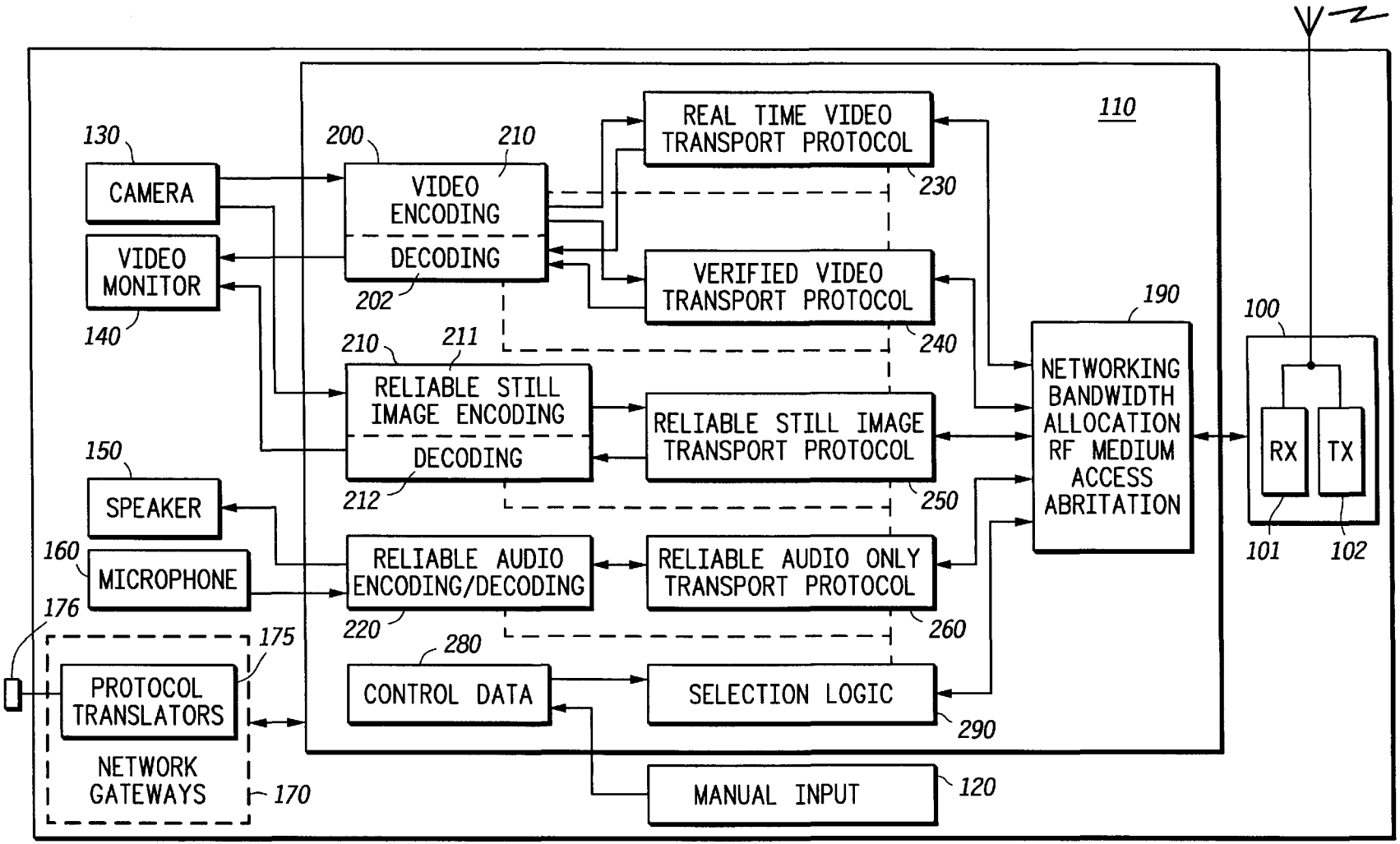

110
130
CAMERA
VIDEO MONITOR
140
200
210
VIDEO ENCODING
DECODING
202
REAL TIME VIDEO TRANSPORT PROTOCOL
230
VERIFIED VIDEO TRANSPORT PROTOCOL
240
210
211
RELIABLE STILL IMAGE ENCODING
DECODING
212
RELIABLE STILL IMAGE TRANSPORT PROTOCOL
250
150
SPEAKER
160
MICROPHONE
RELIABLE AUDIO ENCODING/DECODING
220
RELIABLE AUDIO ONLY TRANSPORT PROTOCOL
260
176
175
PROTOCOL TRANSLATORS
NETWORK GATEWAYS
170
280
CONTROL DATA
SELECTION LOGIC
290
MANUAL INPUT
120
190
NETWORKING BANDWIDTH ALLOCATION RF MEDIUM ACCESS ABRITATION
100
RX
TX
101
102

FIG. 2

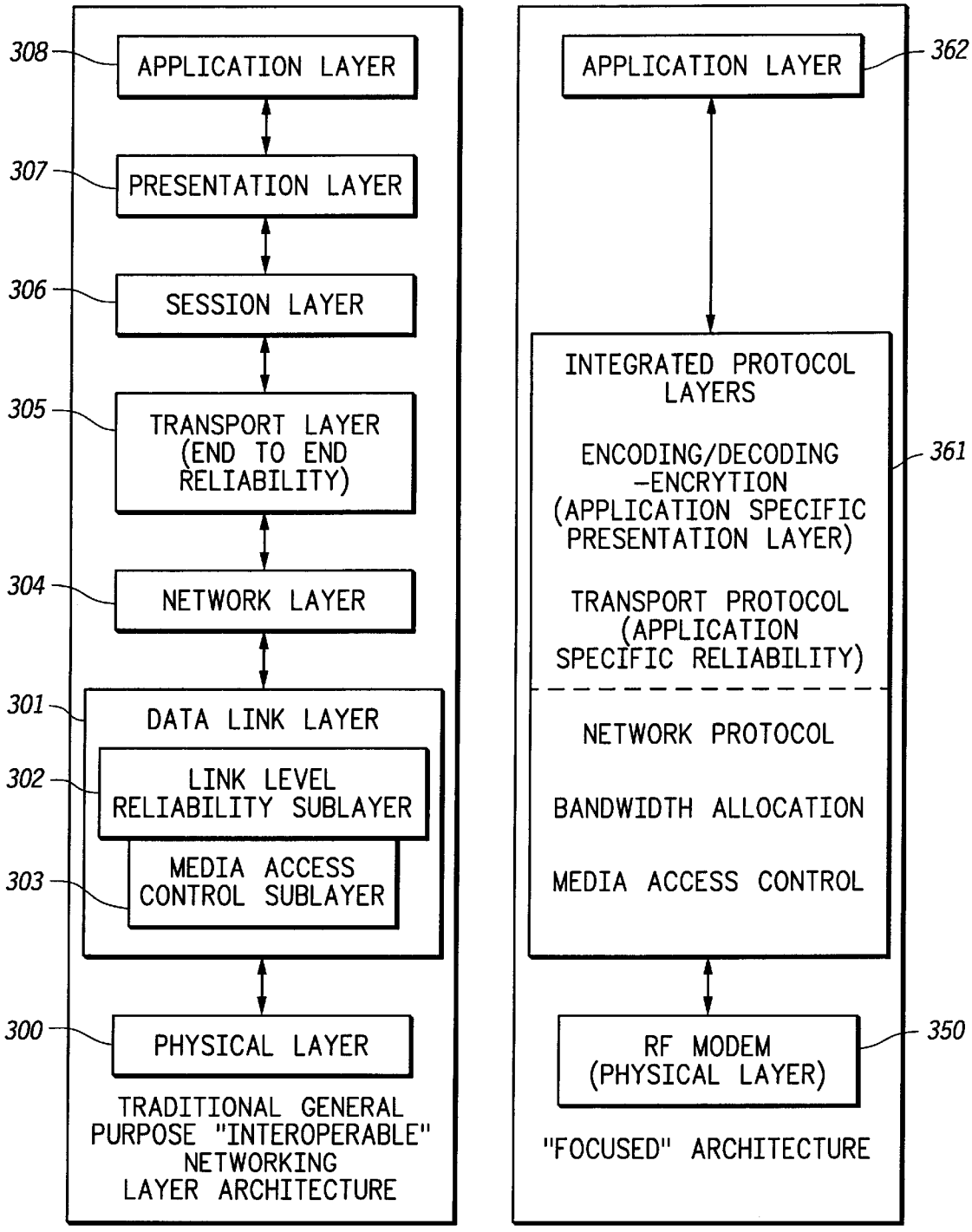

308
APPLICATION LAYER
307
PRESENTATION LAYER
306
SESSION LAYER
305
TRANSPORT LAYER (END TO END RELIABILITY)
304
NETWORK LAYER
301
DATA LINK LAYER
302
LINK LEVEL RELIABILITY SUBLAYER
303
MEDIA ACCESS CONTROL SUBLAYER
300
PHYSICAL LAYER
TRADITIONAL GENERAL PURPOSE "INTEROPERABLE" NETWORKING LAYER ARCHITECTURE
362
APPLICATION LAYER
INTEGRATED PROTOCOL LAYERS
ENCODING/DECODING -ENCRYTION (APPLICATION SPECIFIC PRESENTATION LAYER)
TRANSPORT PROTOCOL (APPLICATION SPECIFIC RELIABILITY)
361
NETWORK PROTOCOL
BANDWIDTH ALLOCATION
MEDIA ACCESS CONTROL
350
RF MODEM (PHYSICAL LAYER)
"FOCUSED" ARCHITECTURE

FIG. 3

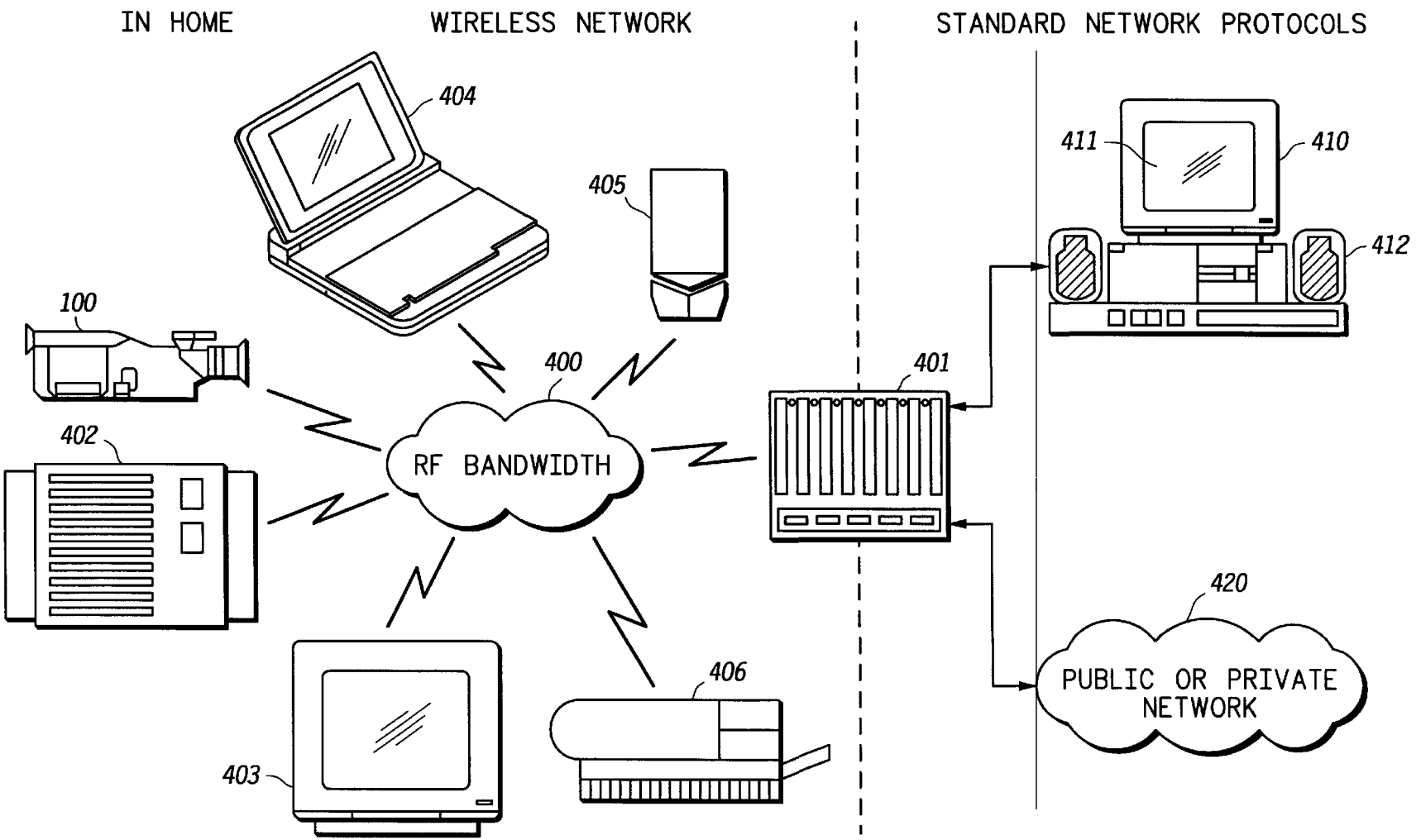

IN HOME
WIRELESS NETWORK
STANDARD NETWORK PROTOCOLS
404
405
411
410
412
100
400
401
402
RF BANDWIDTH
420
PUBLIC OR PRIVATE NETWORK
406
403

FIG. 4

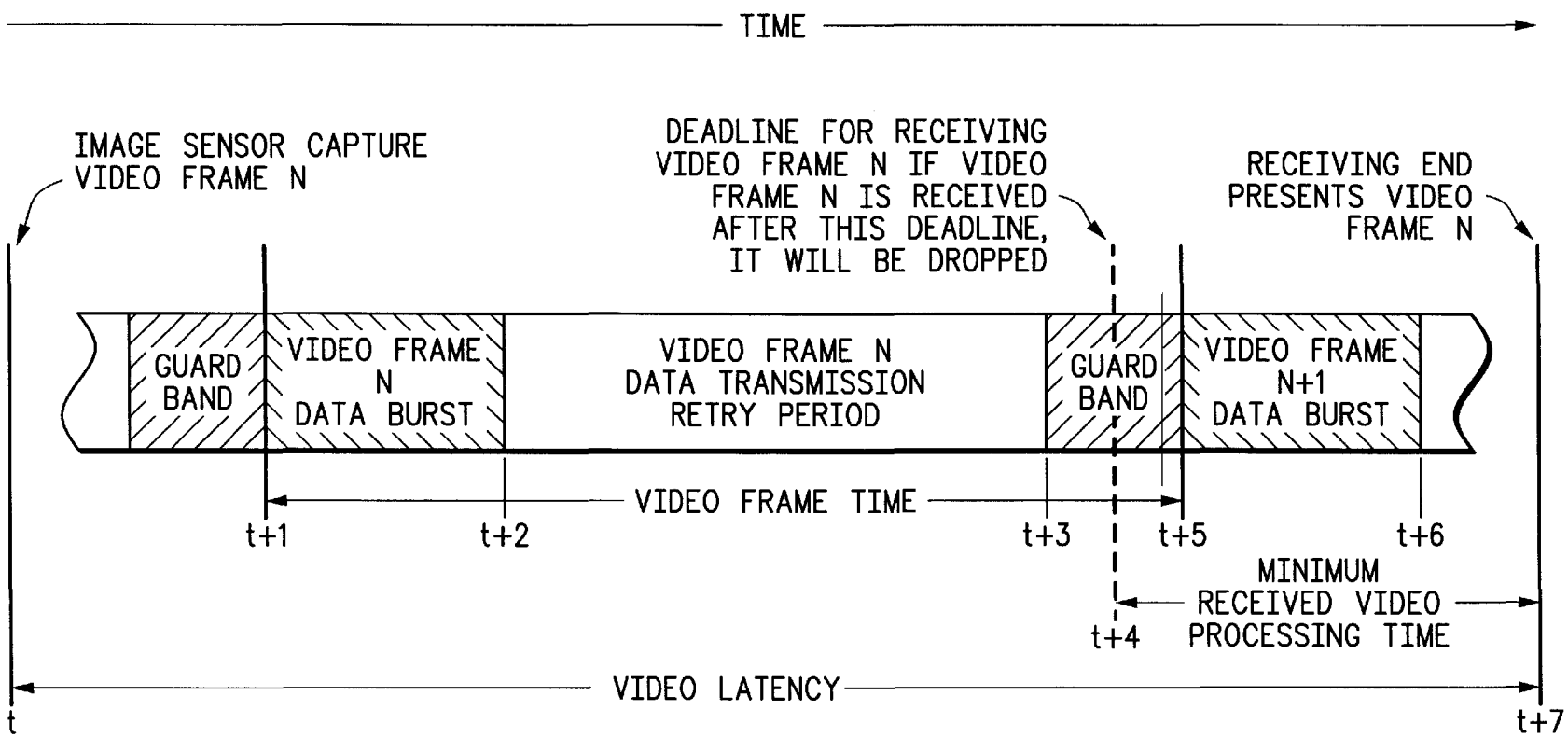

TIME
IMAGE SENSOR CAPTURE VIDEO FRAME N
DEADLINE FOR RECEIVING VIDEO FRAME N IF VIDEO FRAME N IS RECEIVED AFTER THIS DEADLINE, IT WILL BE DROPPED
RECEIVING END PRESENTS VIDEO FRAME N
GUARD BAND
VIDEO FRAME N DATA BURST
VIDEO FRAME N DATA TRANSMISSION RETRY PERIOD
GUARD BAND
VIDEO FRAME N+1 DATA BURST
VIDEO FRAME TIME
t+1
t+2
t+3
t+5
t+6
MINIMUM RECEIVED VIDEO PROCESSING TIME
t+4
VIDEO LATENCY
t
t+7

FIG. 5

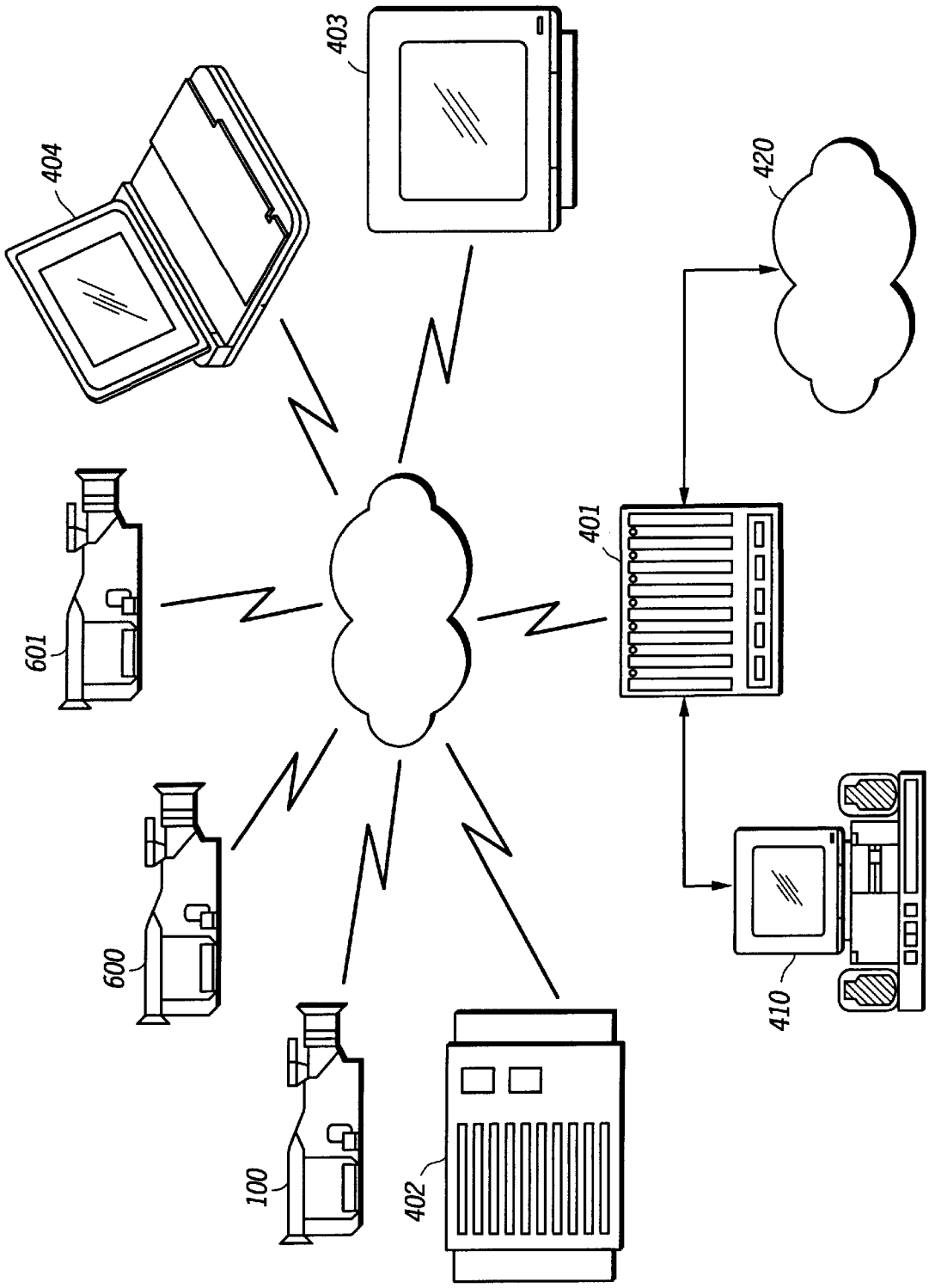


FIG. 6

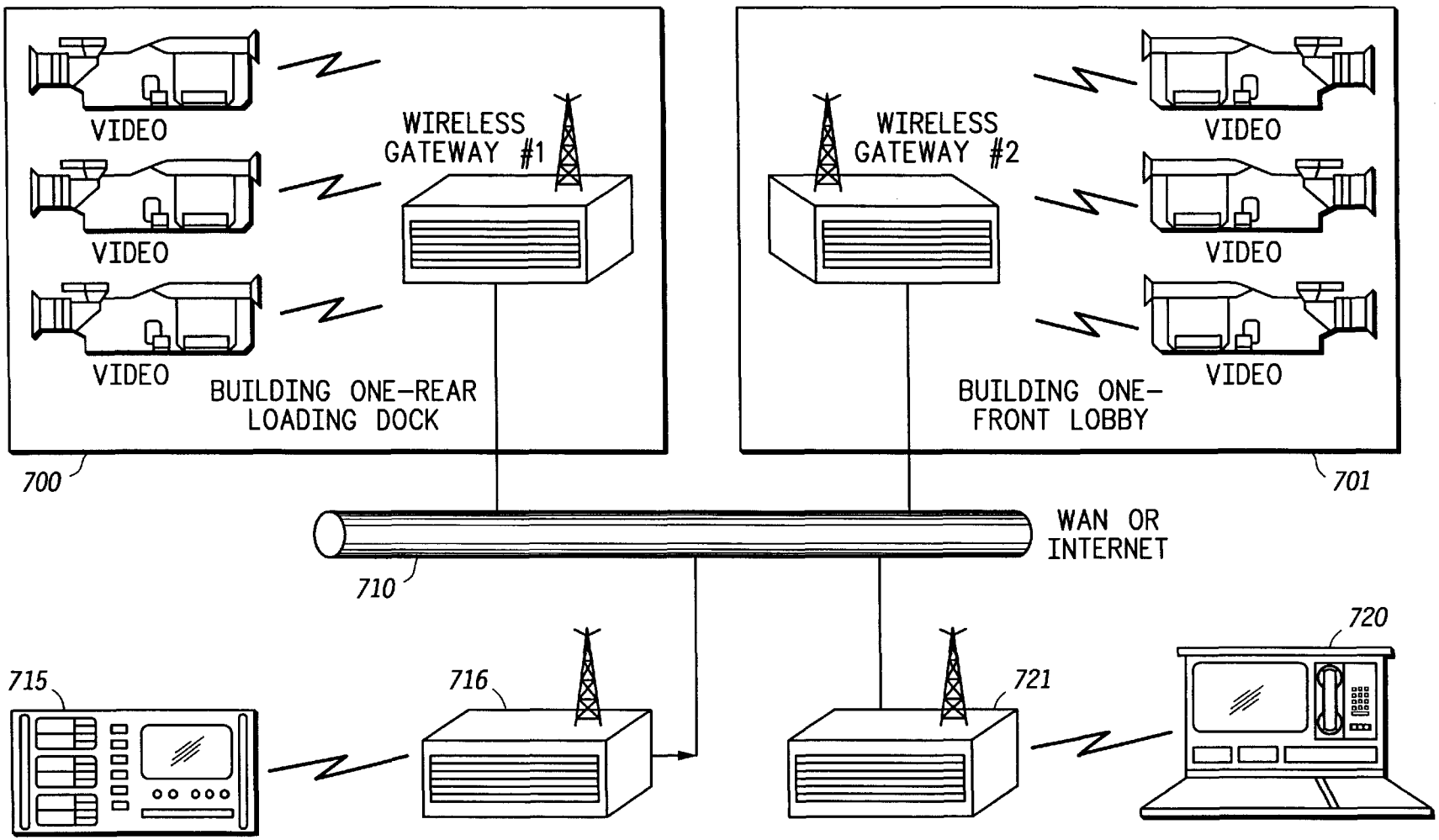

VIDEO
VIDEO
VIDEO
WIRELESS GATEWAY #1
BUILDING ONE–REAR LOADING DOCK
700
WIRELESS GATEWAY #2
VIDEO
VIDEO
VIDEO
BUILDING ONE– FRONT LOBBY
701
WAN OR INTERNET
710
715
716
721
720

FIG. 7

		EXAMPLE 1	EXAMPLE 2	EXAMPLE 3
IMAGE PARAMETERS				
	FRAME SIZE	512 x 512	512 x 512	512 x 512
	FRAME RESOLUTION	270 x 352	270 x 352	480 x 352
	FRAME RATE	15/SEC	30/SEC	X
	COMPRESSION TYPE	JPEG	WAVELET #1	MPEG
	COMPRESSION RATIO	50%	30%	X
	AUTO MODE	NO	NO	YES
AUDIO PARAMETERS				
	NUMBER OF CHANNELS	1	1	2
	SAMPLING RATE	64KBS	64KBS	64KBS
	COMPRESSION TYPE	NONE	NONE	MPEG
	COMPRESSION RATIO	0	0	X
	AUTO MODE	NO	NO	YES
CONTROL				
	LOCAL	YES	YES	NO
	REMOTE	NO	NO	YES
	ON DEMAND	NO	NO	YES
TRANSPORT PARAMETERS				
	REAL TIME(NO ERROR CORRECTION)	YES	NO	X
	VERIFIED(WITH ERROR CORRECTION)	NO	YES	X
	VARIABLE	NO	NO	X
	AUTO MODE	NO	NO	YES

0% 30% 50% 75% 100%

X = DON'T CARE AUTO WILL ADJUST

% BANDWIDTH UTILIZATION

FIG. 8

SELF-CONTAINED WIRELESS CAMERA DEVICE, WIRELESS CAMERA SYSTEM AND METHOD

FIELD OF THE INVENTION

This invention relates to wireless camera devices, including but not limited to video camera devices and still image devices, and it relates to a wireless camera system comprising a self contained wireless camera device in combination with a base station device. It also relates to an architecture for provision of peripheral devices in such a system.

BACKGROUND OF THE INVENTION

Simple master-slave portable wireless video recording devices have been proposed in the past, designed to produce video and associated signals and transmit these wirelessly to a recording station. U.S. Pat. No. 4,097,893 describes one such analog device, in which start and stop (i.e. pause) operation of the recording station is controlled from the camera station. Communication of images from the camera station to the recording station is over a VHF or UHF radio channel

The establishment by the Federal Communications Commission of a nonrestrictive usage frequency band in the 5 GHz range, with channel bandwidth capability for high throughput multimedia data transmission creates a new opportunity for wireless consumer devices having broader bandwidth capability than has heretofore been possible. The ability to efficiently use these frequencies requires greater attention to be given to bandwidth management.

Functionality of previously proposed wireless camera devices has been fairly limited and such devices have so far found little or no acceptance in the consumer marketplace. There is believed to be a demand for a compact, highly functional, broadband wireless camera device.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is a schematic view of a simple point to point multimedia device network in accordance with the invention.

FIG. **2** is a block diagram illustrating the elements of a wireless camera device according to the preferred embodiment of the invention, with optional additional elements for purposes of description of a wireless gateway.

FIG. **3** illustrates a comparison between the protocol structure of a device according to the preferred embodiment of the invention and a standard protocol structure.

FIG. **4** illustrates a wireless camera system according to a preferred embodiment of the invention.

FIG. **5** is a time diagram illustrating video frame transmission for the purposes of explanation of re-transmission.

FIG. **6** is a system similar to that of FIG. **4** but with additional wireless camera devices.

FIG. **7** illustrates a system similar to that of FIG. **6**, in the context of a security system.

FIG. **8** is a table illustrating examples of selection of different combinations of parameters for the purposes of bandwidth control.

DETAILED DESCRIPTION OF THE DRAWINGS

Referring to FIG. **1**, a basic configuration of a system **25** according to a preferred embodiment of the present invention is shown, comprising a camera device **10** and a base station **20**, which is illustrated in a basic form as being a radio base station with a monitor, but can be a mere storage and replay device without a monitor or can be a gateway device.

A first stage in defining the potential for a high quality video/audio-based product, such as that of FIG. **1**, lies in creation of a basic set of enabling technologies. These technologies are predicated on the concept that a dedicated set of data transfer and control protocols can enhance the overall performance and cost profiles of any end product schemes utilizing the approach. The following proposed hardware architecture and communications protocol is intended to provide this low cost/high performance solution. The dedicated purpose wireless protocol layering model described provides operating advantages via a tightly coupled integration of communication protocols, which are targeted to provide an optimum solution to the very specific application of transferring optimized blocks of audio/video information in a high frequency digital state. The architecture is consequently less costly based on this narrower set of protocol requirements and the tighter integration of the layers. Because the communication protocol processing is highly integrated, it reduces the general protocol service access requirements needed in more generally applied interchangeable protocol modules. It has a focused set of requirements and can thus be implemented at a very high level of integration, such as a single chip Application Specific Integrated Circuit (ASIC), which reduces the cost of many components while providing the speed needed for some of the higher data rates.

An architecture for a wireless device is illustrated in FIG. **2**. The device comprises a full duplex RF transceiver **100** connected to a processor **110**, which in turn is connected to a manual input **120** (such as a keypad or control panel), a camera **130** (which has still image and video capability but more generally is any image capture device), a video monitor **140**, a speaker **150**, and a microphone **160**. The transceiver **100** comprises a receiver **101** and a transmitter **102**.

A network gateway **170**, with protocol translator **175**, is also shown in phantom outline. This network gateway is optional in a self-contained wireless camera device and is illustrated here for purposes of later explanation and description of a base station.

The processor **110** can be a microprocessor or digital signal processor or can take the form of an ASIC (with or without an integrated microprocessor). The exact implementation is not important. The processor **110** comprises a video encoding/decoding module **200** (having video compression circuitry **201** and decompression circuitry **202**) coupled at an input and an output of the processor to the camera **130** and the video monitor **140** respectively; a still image encoding/decoding module **210** (having video compression circuitry **211** and decompression circuitry **212**) also coupled at an input and an output of the processor to the camera **130** and the video monitor **140**. It also comprises audio encoding/decoding module **220** coupled at an input of the processor **110** to the microphone **160** and at an output of the processor to the speaker **150**.

Within the processor **110** there is also a communications controller **190** coupled to the RF transceiver **100**. Coupled between the video encoding/decoding module **200** and the communications controller **190** are a real time video transport protocol module **230** and a verified video transport protocol module **240**. Coupled between the still image encoding/decoding module **210** and the communications controller **190** are a still image transport protocol module

250. Coupled between the audio encoding/decoding module 220 and the communications controller 190 is an audio transport protocol module 260. Selection logic 290 is provided, coupled by control connections (shown in dotted outline) to the various modules 200–260. The selection logic 290 is coupled to the communications controller 190 and to a control data generating module 280, which is coupled to the manual input 120.

In the preferred embodiment, still image encoding/decoding module 210 performs discrete cosine transform or block oriented image compression, such as JPEG (Joint Photographers Expert Group) compression and video encoding/decoding module 200 performs full frame compression, such as wavelet or MPEG (Motion Picture Expert Group) compression. Other types of compression can be used in the modules.

In operation, images are captured by the camera 130 and encoded in either video encoding/decoding module 200 or still image encoding/decoding module 210. They are passed to the respective transport protocol module 230, 240 or 250 and passed to the communications controller 190 for transmission by the RF transceiver 100 over a wideband radio channel. At the same time they can be displayed on video monitor 140. Images are received by the RF transceiver 100 and passed by the communications controller 190 to a selected one of the protocol modules 230, 240 and 260 and from there to the corresponding video encoding/decoding module 200 or still image encoding/decoding module 210 for decoding and for display on the video monitor 140.

Audio signals are received by the microphone 160, encoded in encoding/decoding module 220 and passed to the communications controller 190 via audio transport protocol module 260, for transmission (with accompanying video signals if selected). Audio signals are received by the transceiver 100 (e.g. with accompanying video signals) and are passed by audio transport protocol module 260 to audio encoding/decoding module 220, where they are decoded and output from the speaker 150.

Different transport protocol modules such as modules 230 and 240 are selected according to the application that the user selects for operation. Thus, real time video transport protocol module 230 is selected for real time video and minimizes delay of transmission and delay variation to avoid "jitter", while verified video transport protocol module 240 performs error correction or selected retransmission to provide error-reduced transmission at the expense of delay in transmission. The selection of the transport modules 230–260 and the encoding/decoding modules 200–220 is performed by selection logic 290.

There are two principal processes by which selection logic selects the desired transport modules and the encoding/decoding modules. The first method is by manual selection via the manual input 120 and the second method is by receipt of commands from the RF transceiver 100.

To manually select a transport module and corresponding encoding/decoding module, the user selects an application using the manual input 120. For example, the user can select real time video mode, or verified video mode, or sill image mode and control data generating module 280 generates corresponding control data for selection logic 290 to select the corresponding transport protocol module 230, 240 or 250 and its corresponding encoding/decoding module 200 or 210.

To remotely select a transport module and corresponding encoding/decoding module, control data is received via radio transceiver 100 and passed to selection logic 290 via communications controller 190. As before, the selection logic selects the corresponding transport protocol module 230, 240 or 250 and its corresponding encoding/decoding module 200 or 210.

Under control of the manual input 120, control data generating module 280 can generate control data for transmission via the communications controller 190 through the RF transceiver 100 to another camera device or to a base station over the wideband radio channel. If sent to another camera device, the control data is received by corresponding selection logic in the remote camera device. When control data generating module 280 generates control data for transmission to a remote camera device, it can simultaneously cause a selection by selection logic 290 of corresponding encoding/decoding and transmission modules in the device 100.

Control signals or commands that can be generated by control data generating module 280 fall into three categories: video control commands, video quality control commands and bandwidth control commands. Video control commands include pause, replay, rewind and fast-forward. They also include sets of commands that cause selection of automatic mode vs. manual mode. Video quality control commands include frame size, frame resolution, frame rate, compression type and compression ratio. Bandwidth control commands define percentage of allocation of bandwidth for a given camera or from one camera to another, expressed as a bandwidth allocation value or a proportion of available bandwidth for as the number of camera devices permitted in a band.

Video encoding/decoding module 200 and real time video transport protocol module 230 can together be viewed as first video processing and video reconstruction circuitry that provide to the transceiver 100 selectively processed first video signals processed according to a selected protocol scheme and provide reconstructed second video signals to the monitor 140. Similarly, video encoding/decoding module 200 and verified video transport protocol module 240 can together be viewed as second video processing and video reconstruction circuitry that provide to the transceiver 100 selectively processed first video signals processed according to a different selected protocol scheme and provide reconstructed second video signals to the monitor 140. Similarly, reliable still image encoding/decoding module 210 and reliable still image transport protocol module 250 can together be viewed as third video processing and video reconstruction circuitry.

Each selected protocol scheme has at least one of a selectable transport protocol, a selectable image coding (compression/decompression) protocol, a selectable audio protocol scheme and a selectable control protocol. Selection of different protocols gives rise to different bandwidth usages and allows more optimized or balanced usage of available bandwidth.

The architecture described and illustrated integrates the various communication protocol layers into a common processing block between the physical layer and the application layer. This architecture decouples the communication protocol layers from the RF transceiver functional block. It also decouples the communication protocol layers from the multimedia I/O which represents the application layer. The architecture is based upon a presumed system in which a variety of transmission and reception devices are operating.

Encoding/decoding algorithms and transport protocols are configured and optimized based on the multimedia data type and the user's preferences. These various data paths con-

verge upon the more common networking, bandwidth allocation, and RF medium access protocols.

FIG. **2** shows that there are differences in transport protocol for real time video and verified video. Real time video, and real time audio are isochronous. This means that these transport protocols must balance the reliable transfer concerns with the timing required for proper presentation at the receiving end. For verified video or audio, the intended immediate destination for the multimedia data is not real time presentation, but rather storage. It is referred to as "verified" since higher levels of reliable transfer (e.g. higher error correction and/or retransmission) can be used without high bandwidth usage.

The protocol layer stack model to be used in the proposed architecture is compared to the International Telecommunication Union (ITU) standard network protocol layer model in FIG. **3**.

On the left hand side of the figure, the standard ITU protocol layer model is illustrated, comprising a physical layer **300** and a data layer link layer **301** having a link level reliability sub-layer **302** and a media access control sub-layer **303**. Above the data link layer is a network layer **304** and above the network layer **304** are a session layer **306**, a presentation layer **307** and an application layer **308**. To the right of this standard model is illustrated, for purposes of comparison, the protocol layer stack model for a camera device according to the preferred embodiment of the invention. This model comprises an RF modem **350**, a layer **361** which integrates encoding/decoding, encryption, transport protocol, network protocol, bandwidth allocation, and media access control. The encoding/decoding and encryption is an application specific presentation layer. The transport protocol is an application specific reliability protocol. Above these integrated protocol layers is the application **362**.

The RF modem layer **350** is implemented in the full duplex RF transceiver **100** of FIG. **2**. The integrated protocol layers **361** are implemented in the processor **110** of FIG. **2** and the application layer **362** is implemented in the form of the camera **130**, the video monitor **140**, the speaker **150**, the microphone **160**, and the network gateways **170** of FIG. **2**. In the preferred embodiment, the integrated protocol layers **361** are admitted on a logic board and a radio control board, in which processes of the protocol below the dotted line of FIG. **3** are implemented on the radio control board and processes above the dotted line are implemented on a logic board. In effect, this has the result that the encoding/decoding modules **200**, **210** and **220** and the transport protocol modules **230**, **240**, **250** and **260** are all implemented on the logic board and the communications controller **190** is implemented on a separate communications control board. The selection logic **290** and the control data generating module **280** are implemented on the logic board. These details are, of course, not critical and greater integration can be achieved with all the elements of the integrated critical layers being implemented in a single, highly integrated module.

The advantages of a proprietary multimedia communications protocol stack over the ITU standard for this architecture is optimum use of bandwidth, cost, performance, and the flexibility to tailor the protocols for the various multimedia transmissions.

The ITU standard seeks to define each layer independently and to define a set of protocol access points between each layer. The strict interpretation of this model results in creating a set of interchangeable protocol building blocks that provide a very general solution to digital communications networking. Each general purpose protocol building block tends to be a costly, yet reasonable solution for a broad range of networking challenges. This architecture is critical for heterogeneous, standardized networks that are built from commercially available, interoperable components. Conversely, the dedicated purpose architecture now described builds a homogeneous RF wireless network with a uniquely qualified set of components.

The architecture described focuses upon providing optimum solutions for a particular family of wireless devices. It provides transmission reliability at the link layer and not on an end-to-end regime. (An end-to-end reliability is not needed since there is no multiple-hop routing in the common uses of the wireless network.) If an application is developed which needed end-to-end reliability within the wireless network, layers can be added between the application layer **362** and the integrated protocol processing block **361**. For the current applications, the transmission reliability is specific tailored to the needs of the user, the multi-media data type being transferred, and the RF environment.

The architecture described operates in a somewhat closed homogeneous RF wireless network. The limited set of components that operate within the network only need to be interoperable with each other. The closed nature of the network allows value added features to be included, with a controlled, limited impact upon existing device interoperability. The ability to include such value added features, allows the wireless product developer to differentiate this product from the others in the market using other network approaches.

The closed aspect of this architecture does not, however, limit interoperability with other, more general purpose networks. Network gateways **170** bridge the wireless network with other standard networks. FIG. **4** illustrates the use of a gateway to interconnect the proposed wireless network to standard networks.

The presence or absence of network gateways **170** in a particular device depends on the function of that device. For example, a self contained wireless video or still camera need not have network gateways **170**, while a dedicated base station preferably has network gateways **170** but does not have the camera **130**, video monitor **140**, speaker **150** or microphone **160**. Accordingly, the particular application layer devices that are included in any particular product will depend on the intended function of the camera device product.

Referring to FIG. **4**, the wireless camera device of FIG. **1** is shown communicating over a wideband radio channel **400** to a wireless multi-media gateway **401** and a wireless disk drive **402** and a wireless monitor **403**, as well as other miscellaneous devices which will not be described in detail, but may include a lap-top computer **404**, a remote control device **405** and a printer **406**. Each of the devices **100** and **401** thru **406** has an architecture as described with reference to FIG. **2** and FIG. **3**. The gateway **401** communicates with a multi-media personal computer **410** having a monitor **411** and audio speakers **412** and it communicates with a public or private network **420**.

The wireless multimedia gateway depicted in FIG. **4** provides protocol translation to convert the wireless protocol to the standard public network protocol or the standard PC interface protocol. The gateway converts the focused, optimized protocol used on the wireless network to general purpose protocol, such as Internet protocol (IP) used in the open system networks. In essence the gateway provides the wireless network devices with points of interoperability to

outside systems. The provision of the gateway **401** has a number of advantages, including the ability to network multiple camera devices and operate them under remote control.

This invention, in its preferred embodiment, also provides flexibility of bandwidth usage for video quality and transmission reliability tradeoffs. Bandwidth can be traded for video quality and transmission reliability based on the needs of a given application.

The approach described is inherently bandwidth sensitive. The estimated peak bandwidth limit is at least 10 Mbps. This rate is sufficient to support various combinations and quality levels of the transmission of video, still images, audio, data, graphics and text. A goal is to provide a bandwidth usage strategy that will accommodate the maximum number of devices in a wireless network with highest possible transmission reliability and the level of video quality necessary for a given application.

Video quality and reliability are singled out for discussion over other multimedia types because of the large demand placed on bandwidth by video transmission and the bandwidth tradeoffs that are possible with video. Video quality is represented as resolution of each video frame, the rate at which the video frames are updated and compression rate of the transmitted video.

The resolution of still images that make up the video are only limited by the image sensor of the camera. Given a high end image sensor, video resolution can be supported in a range from HDTV (high definition television) or high resolution computer monitor quality to very small thumbnail images. The lower the video resolution the more grainy the video image appears. Higher video resolution will require commensurate higher bandwidth usage for transmission. Selection of video resolution is based on the application demands and/or the user's preferences.

Video frame rate is the speed that still image frames are presented upon the monitor of the base station **20** or the monitor **140** of the camera device to produce the illusion of full motion video. The described technology can support video frame rates ranging from National Television Standards Committee's (NTSC) standard of 60 interlaced fields per second through stop action video used for video conferencing to single frame still images. Slower than the above noted video frame rates can introduce an unintended effect of jerkiness in the motion of high speed "action" video sequences. Faster video frame rate signals will require higher bandwidth usage for transmission. Selection of video frame rate is, again, based on the application demands and/or the user's preferences.

Video compression rate is an indication of the amount by which the video data has been reduced using various compression techniques. For instance, broadcast quality, uncompressed digital video requires a bandwidth of 150 Megabits per second (Mbps). Given 10 Mbps limit of the RF subsystem, uncompressed digital video transmission is not practical. Current standard video compression algorithms, including MPEG, wavelet, or H.320, will compress video to within these speed limitations. Any video compression will cause some loss of the video data, but the amount of loss can be limited based on the video compression rate. Lower rates of video compression provide higher perceived image quality and use more bandwidth. The compression ratio/bandwidth tradeoff is dependent upon the application. A baby monitor, for instance, could operate with a high video compression rate and use less bandwidth because of the lower demands for image quality.

As with video quality, the unique timing requirements of video directly relate to reliability. As discussed earlier, there is a different set of concerns with the transmission of real time video versus verified video. As previously noted, real time video is a video stream that is played back, to the user's perception, immediately upon reception. Verified video, or non-real time video, is not intended to be played back immediately, but rather is stored for later viewing.

The transmission of real-time video must be isochronous to prevent buffer over flow or underflow in the receiving end. In other words a steady flow of video data must be received such that it can be displayed without either running out of or being overrun by video data. Non-real time video is not sensitive to this problem, unless the transmitting end is in danger of overrunning its buffers between the image acquisition and transmission phases.

The transmission of real time video and non-real time video presents a tradeoff in reliability. The reliable transmission of video data that results in later video delivery for a real time application serves no purpose. Specifically, video that is not received within the presentation time will cause a frame skip. In the event that a frame is to be presented but has not been completely received, a buffer underflow condition occurs which results in a frame skip. Transmission of non-real time video is not constrained by the timing of immediate playback. As a result more reliable transmission methods can be used to create a non-real time yet verified video transmission, thus the term "verified video".

Re-transmission can be used to provide some limited measure of reliability for real time video transmission. A goal of this method is to provide time for transmission retries prior to presentation time. The method tends to balance the amount of reliability and allocation, with bandwidth or larger receive buffer sizes and increased video latency. FIG. **5** presents a simplified example of video frame transmission timing which illustrates some of the parameters for the retransmission method. In practice the technique may be complicated by such issues as the MPEG video compression scheme, which does not always transmit full video frames.

As FIG. **5** shows, a burst of video frame data at bandwidths higher than the constant video rate will provide time for transmission retries prior to the next video frame burst. Beginning at time t the image capture device (e.g. camera **130**) has captured a complete video frame N. Starting at this time it is the function of the transport protocol layer to deliver this frame reliably to the corresponding transport protocol layer at the receiving end.

Time t+1 (which occurs following a guard band following preceding activity on the channel), the transmitter transmits the video frame N in a data burst, completed at the time t+2. Starting at time t+2, there is a period extending to time t+3 during which the transport protocol layer module of the receiving device (specifically verified video transport protocol module **240** of FIG. **2**) receives the video frame N data burst, performs error correction using any embedded error correction code in the data burst and determines whether the data burst is received correctly. If it is not received correctly, the verified video transport protocol module of the receiver sends a negative acknowledgment message to the verified video transport protocol layer module of the transmitter and there is an opportunity for the transmitter to perform a re-try, retransmitting video frame N data burst. At time t+4 illustrated by the dotted line in FIG. **5**, there is a deadline for receiving video frame N. If the receiver does not successfully receive video frame N before this deadline, the video frame is dropped.

The receiver has a timer (not shown in FIG. **2**) which commences timing at time t+2 (or can commence timing at t+1), as measured at the receiving end, and if the receiver transport layer protocol cannot determine before time t+4 that frame N has successfully been received, it drops the frame and awaits the next video frame data burst N+1. This data burst is transmitted by the transmitting device at time t+5, ending at time t+6. The receiver (assuming it has successfully received video frame N data burst) waits until time t+7 before presenting video frame N on the receiver monitor. By delaying until time t+7, the receiver has the time from t+4 until t+7 as its minimum received video processing time. If the receiver fails to receive video frame N data burst, it can simply present the preceding video frame. The overall latency in the system is from time t to time t+7. Every frame will be delayed by the receiver until time t+7 (regardless of whether the frame was received before time t+4), with the result that jitter at the receiver monitor is avoided.

Using this technique, average video bandwidth increases based on the average number of retries. The video burst rate of bandwidth that is needed to support this method depends upon the amount of time left for retries, which in turn dictates the reliability of the transmission.

Time for transmission retries can also be increased by providing more buffer space for in transit video data. Increased buffering will increase the video latency which, as shown in the FIG. **5**, is the time between capturing and presenting the video. The amount of acceptable video latency will be dependent upon the application. For example, long video latencies in a two-way interactive video application can be awkward and distracting to the users.

Real time audio is also isochronous and as such shares these same issues. However, due to lower bandwidth requirements for audio, this issue is not as costly to solve in terms of bandwidth, processing power, and end-to-end latency.

In case of audio/video program transmissions, the audio and video presentations are synchronized.

The method of access control to the RF media is not critical. Methods that can be employed include Frequency Division Multiplex (FDM) techniques or Time Division Multiplex (TDM) techniques or in some advanced cases Code Division Multiplex (CDM) techniques. Methods may also include fixed allocation of bandwidth or dynamic allocation of bandwidth based on need.

It is not critical whether a decentralized type of media access control is used in, or a direct central control of allocation by a gateway is used. For instance, decentralized control has the advantage of allowing any combination of wireless devices to interact, without the added expense of a central control unit. A decentralized control approach also minimizes the risk of single point failure.

The wireless transmission technology in the lightly regulated environment of the 5.2 GHz band is very flexible. The flexibility of this technology can be taken advantage of to develop a whole family of products, each with its own characteristic use of the technology. Those products share many common attributes. For example, if they are to interoperate at the local area level, each must: support a subset of the various multimedia transport protocols; provide the RF and antenna control sections; and share a networking and RF media access control algorithm.

One of the primary issues of a network protocol in a wireless network is to allocate bandwidth and time slots to the members of the network. This issue favors a tight integration of network and media access control layer. For the purpose of explanation of bandwidth allocation and control, FIG. **6** is presented, illustrating a network such as that of FIG. **4** with the addition of second and third wireless camera devices **600** and **601**.

In the complex network, of FIG. **6**, a "smart" control of bandwidth based on the user's intentions is provided. Under this scenario, the user may have multiple low resolution video inputs. In the event that the user wishes to focus in detail on the output of a single video source, e.g. wireless camera device **600**, commands to increase frame rate or resolution may be sent to the camera device **600** (or other input device). At the same time, commands are sent to the other video image capture devices **100** and **601** to reduce their frame rates or resolution in an effort to balance the bandwidth usage.

The capability described enables the organization of a number of "local" RF clusters of devices into logically accessible "higher level" groups that shield the user from the specific internal system details of that organization, and still permit an authorized remote user to modify the operation of any particular device.

One simple application example that could use this approach would be a campus security system illustrated in FIG. **7** that has a considerable number of wireless devices providing audio and visual surveillance. These devices could be arranged in groups **700** and **701** at various physical locations, (for instance at doors and windows of the buildings in the complex). These "local" RF clusters of devices could be interconnected by standardized Local Area Networks (LAN's) **710** to provide access to the devices from display equipment located anywhere on the LAN (e.g. security monitoring stations **715** and **720** via wireless gateways **716** and **721**).

This approach to organizing the access to the devices provides a very powerful logical mapping or switching capability. For instance, the media information from a group of cameras located on the rear of the first building could be accessed as a single file of media data that contains multiple timestamped views and is logically labeled as "Building One—Rear Loading Dock". In addition, the users operating the display equipment could change various operating parameters of the surveillance equipment for maximum flexibility.

FIG. **8** illustrates examples of various parameters that can be adjusted to control bandwidth utilization between multiple devices operating on a common bandwidth. The various rows in the table of FIG. **8** are different parameters that can be adjusted or selected and the different columns show various examples of how these parameters give rise to different bandwidth utilization estimates.

The adjustable parameters fall into four broad categories: image parameters, audio parameters, control parameters and transport parameters. Selectable image parameters include frame size, frame resolution, frame rate, compression type, compression rate, compression ratio and auto mode. Selectable audio parameters include number of audio channels, sampling rate, compression type, compression ratio and auto mode. Control parameters include local operation, remote operation and on-demand mode. Transport parameters include real time (i.e. no error correction) verified (i.e. with error correction), variable and auto mode.

In examples 1 and 2 of FIG. **8** the frame size is 512×512 and the frame resolution is 270×352. In the first example the frame rate is 15 frames per second, the compression type is JPEG, the compression ratio is 50% and auto mode is off. In the second example, the frame rate is 30 frames per second,

the compression type is wavelet #1, the compression ratio is 30% and the auto mode is off. For examples 1 and 2 the audio parameters are the same and the control parameters are the same. In example 1 error correction is used while in example 2 error correction is not used. As a result of these alternative selections of parameters, example 2 gives rise to higher bandwidth utilization than example 1. In the table the estimated bandwidth utilization of example 2 is 50%, while the estimated bandwidth utilization for example 1 is only 30%.

From this, it can readily be seen that two cameras can simultaneously be operated using the high frame rate and high level of verification of example 2, but if a third camera device is to enter the same bandwidth, it would be preferable (indeed necessary) for all three cameras to revert to the combination of parameters illustrated in example 1. The switching from the set of parameters of example 2 to the set of parameters of example 1 takes place in response to each camera that is operating according to the parameters of example 2 receiving a control command requiring those cameras to degrade to a lower bandwidth utilization. The control command can come from a central controller such as the security monitoring station **715** of FIG. **7** or can come from the third camera (e.g. camera device **601** of FIG. **6**) making a request to enter the shared bandwidth. The latter scenario provides an ad hoc network in which all users would voluntarily degrade as the network became more congested. In such an arrangement it is preferable to provide a minimum level of service (e.g. that of example 1) beyond which a given device would not degrade further. Upon reaching this minimum level of service, all devices being requested to degrade respond with a negative acknowledgment, in effect telling the requesting device that no further bandwidth is available.

The third example of FIG. **8** has the same frame size as the first two examples, but has a higher frame resolution of 480×352 pixels and uses MPEG compression. Two audio channels are provided, using MPEG audio compression, and remote and on demand control is enabled. In this example, a single wireless camera device will use 75% of the available bandwidth. Clearly when a single camera device operates using these parameters, no other device is able to enter the channel (unless that other device can enter at a bandwidth utilization even lower than the bandwidth utilization of example 1).

In the scenario of FIG. **7**, in the event that a user monitoring the surveillance area from one of the security monitoring stations **715** and **721** wishes to examine with greater scrutiny a particular camera, a command can be sent to one of the cameras (e.g. camera device **601** of FIG. **6**) instructing that camera to increase its resolution as shown in example 3 of FIG. **8** and to change its compression type, while at the same time frames are sent to other camera devices (e.g. devices **10** and **600**) instructing those camera devices to degrade completely, either by ceasing transmission or by reducing their frame rates to a very low level.

In the preferred embodiment, selection logic **290** of FIG. **2** comprises a pre-programmed table of different levels of service in which different combinations of parameters of FIG. **8** are pre-programmed. In this manner, a user can select, through manual input **120**, a particular package of parameters to support a particular desired application. Examples of packages of desired parameters could include still images, scenic video, motion video, security surveillance, etc. According to the selected application, the optimum package of parameters is selected.

Referring one again to FIG. **6**, the provision of gateway **401** makes the home wireless network a conduit for audio/video recording and playback, video on demand from an outside network, and wireless network browsing (as well as other functions) simultaneously.

In a multi-user, multi-function environment, shared components such as monitors or disk drives **402** must be addressable and may also must provide a form of dedicated access to prevent users from corrupting each other's data.

The system is easy for the consumer to use and reconfigure. The initial products should be capable of detecting the components in the system configuration and acting accordingly. Adding a new component to the system should not pose a technical challenge to the user.

Privacy and security algorithms are included that allow a home's wireless components to interact without concern that components outside the home network can gain access or provide interference. These algorithms provide authentication and encryption. As new components that are added to the network, each is easily synchronized with the unique security "keying" that provides secure access.

Some of the main product configurations for video and/or audio delivery are: point to point video; multi-point video; full duplex video; and point-to-point, multi-point, full duplex audio.

The point to point video category encompasses the set of applications where there is a need to transmit video from an origination site to a reception site. Multi-point video encompasses the set of applications where there is a need to transmit video to or from an origination site to multiple reception sites. Full duplex video includes the set of applications where there is a need to transmit and/or receive video from two or more origination and/or reception sites.

The same options exist for audio configurations to be added to most of the video configurations.

The range of these potential configurations are illustrated by FIG. **6**. Many of the potential product embodiments described based upon the core technology require connection with outside, standard networks such as the Internet. In this case, a device class for providing data translation support also present an opportunity for provision of dedicated purpose, integrated application modules. Termed "wireless gateway" for this discussion, this class of devices share some common characteristics.

Various models and options of wireless gateways may be provided. All wireless gateway models capability of receiving and transmitting at bandwidth levels that are necessary to transfer the various multimedia data types, remote control, or transport protocol signaling. Wireless gateways must be capable of supporting the features of the other devices in the premise's wireless network, as well as the user's external connection requirements. Each user will have a different set of expectations for connection to the outside world and potential hardwired networks within the household that the gateway must support.

A high end model wireless gateway could provide expansion slots for various Network Interface Cards (NIC). The fully equipped gateway may support cable modems, satellite antenna connections, and telephone lines, to the external world as well as internal hardwired networks such as Ethernet.

The wireless multimedia gateway contains the capability of high bandwidth receive and transmit. For instance, it can receive verified video and still images for storage. It may transmit video either real time to the monitor or verified video and still images for transfer to the PC or the network, or it may transmit and receive at much lower rates for remote control and transport protocol signaling.

The gateway may also provide direct access to non-wireless shared resources, such as disk drives and printers. The gateway provides the ability to receive remote control from either a directly connected PC, an incoming telephone call, or a wireless remote control device. Remote control commands from a PC or the external network may be routed to other hardwired wireless devices.

Various models of wireless video image acquisition devices such as cameras may be provided. All camera models can use high bandwidth for transmission of real time video data and each can use low bandwidth to transmit and receive for remote control and transport protocol signaling. Higher end camera models may provide more flexibility and capabilities in terms of video frame rates, image resolution and video compression rates. They may also support synchronized audio and video. Inexpensive camera applications, such as an infant monitor, can have lower target bandwidth usage by taking advantage of low resolution image sensor, fixed transmitted resolutions, slow, fixed rate video framing, and high video compression ratios.

The wireless monitor supported by this modular system could also impose a wide range of demands. In on embodiment it could be a high bandwidth receive device and low bandwidth transmit device. It may receive real time audio/video only for immediate playback or still images for display. It in turn may transmit and receive at much lower rates for remote control and transport protocol signaling. Other various models of wireless video monitors may also be provided, each with its own minimum and maximum demands. For instance, some monitor models may use high bandwidth for reception of video stream data or high resolution still images. Higher end monitor models will likely provide more capabilities in terms resolution and compatibility with the higher end cameras.

Monitor **403** is able to receive real time video whether it is received from a camera or a storage device. Added options may include provision of a port for a photo printer that prints the currently displayed still image or video frame. Among the advanced features of a wireless monitor there may be an option to split the screen for inputs from various sources or display on screen information in the form of overlays or digital effects. This option is also highly dependent upon how the bandwidth is shared between various components.

The storage peripheral **402** denoted as "wireless disk drive," has the capability of high bandwidth data receive and transmit. It receives verified audio/video and still images for storage. It is also capable of receiving real time audio/video for applications that both record and play back simultaneously. An optional feature is transmission of audio/video data in either real time mode to the monitor or verified audio/video and still images for storage to the gateway. As with other network devices, the drive transmits and receives at much lower rates for remote control and transport protocol signaling. This device provides storage that can be archived and is easily expandable. (One configuration option may support a removable hard disk type device to provide such capability. For instance, one and two gigabyte removable disks are available on the market today that provide sufficient storage for log video streams and a multitude of still images. Even a 100 Megabyte removable disk would be useful for fairly extended video streams.)

More than one type of wireless video disk drive may be provided. All wireless disk drive models bear the capability of both receive and transmit using variable bandwidths needed to transfer the various multimedia data types, remote control, or transport protocol signaling. The higher end wireless disk drive models provide more capabilities in terms of storage and multiple user support features.

In summary, the system described optimizes the relatively unregulated characteristics of the new frequency allocation to provide extremely high quality transmission in a small, low cost and power efficient end product package, enabling the creation of a revolutionary class of video-enabled, personal communication devices.

The various arrangements described above and illustrated in the figures are given by way of example only and modifications of detail can be made by one of ordinary skill in the art without departing from the spirit an scope of the invention.

We claim:

1. A self-contained wireless camera device for communication with a base station device from which compressed video signals from the base station are transmitted to the wireless camera device, the wireless camera device comprising:

a camera;

video compression circuitry coupled to the camera, receiving video signals from the camera and providing selectively compressed video signals from the camera, compressed according to a selected protocol scheme;

selection logic coupled to the video compression circuitry to control selection of a protocol scheme;

a radio transmitter coupled to the video compression circuitry for transmission of the compressed video signals from the camera;

control circuitry, generating control commands, the control circuitry being coupled to the radio transmitter whereby the radio transmitter transmits the control commands to the base station device for control of transmission of compressed video signals from the base station;

a radio receiver for receipt of the compressed video signals from the base station;

video decompression circuitry coupled to the radio receiver, receiving the compressed video signals from the base station and providing decompressed video signals; and

a display selectively coupled to the camera and the video decompression circuitry, selectively displaying images from the camera and images represented by the decompressed video signals.

2. The wireless camera device of claim **1**, wherein the control commands include: a video replay command; a rewind command; and a fast forward command.

3. The wireless camera device of claim **1**, wherein the control commands include a video quality command.

4. The wireless camera device of claim **1**, wherein the control commands include a bandwidth control command.

5. A wireless camera system comprising:

a self-contained wireless camera device comprising:

a camera;

video compression circuitry coupled to the camera, receiving video signals from the camera and providing compressed video signals from the camera;

a radio transmitter coupled to the video compression circuitry for transmission of the compressed video signals from the camera;

control command generation circuitry, coupled to the radio transmitter, generating control commands to be sent to a base station device for control of transmission of compressed video signals from the base station;

a radio receiver for receipt of compressed video signals from the base station;

video decompression circuitry coupled to the radio receiver, receiving the compressed video signals from the base station and providing decompressed video signals; and

a display selectively coupled to the camera and the video decompression circuitry, selectively displaying images from the camera and images represented by the decompressed video signals

and a base station device comprising:

a radio receiver receiving the compressed video signals from the camera;

a storage device for storing signals derived from the compressed video signals from the camera;

a transmitter coupled to the storage device for retransmitting the compressed video signals from the camera as compressed second video signals; and

control command signal receive circuitry responsive to the control commands from the camera device to control retrieval of the signals derived from the compressed video signals stored in the storage device and retransmission of the compressed second video signals.

6. The wireless camera system of claim **5** wherein the control commands include: a video replay command; a rewind command; and a fast forward command.

7. The wireless camera system of claim **5**, wherein the base station device has transport circuitry operable to deliver video signals derived from the compressed video signals from the camera as internet protocol packets at an output port.

8. A wireless camera system comprising:

a first wireless camera device comprising:

a camera;

video compression circuitry coupled to the camera, receiving video signals from the camera and providing compressed video signals from the camera;

a radio transmitter coupled to the video compression circuitry for transmission of the compressed video signals from the camera;

a radio receiver for receipt of command signals, wherein the video compression circuitry is responsive to receipt of a first control command by the radio receiver to modify operation of the video compression circuitry;

and a base station device comprising:

a user selection input;

control circuitry coupled to the user selection input, the control circuitry for receiving a second control command from the user selection input seeking service for a second wireless camera device; and

a transmitter, coupled to the control circuitry, for transmitting to the first wireless camera device the first control command, thereby causing the first wireless camera device to adjust its operation to accommodate the second wireless camera device.

9. The system of claim **8**, wherein the base station device comprises a radio receiver and the control circuitry is coupled to the radio receiver to receive the second control command from the second wireless camera device.

10. The system of claim **8** wherein the first wireless camera device and the second wireless camera device share use of a common radio channel.

11. The system of claim **8**, wherein the video compression circuitry of the first wireless camera device is responsive to receipt of the first control command to modify operation of the video compression circuitry to decrease bandwidth of the compressed first video signals.

12. The system of claim **11**, wherein the video compression circuitry of the first wireless camera device is responsive to receipt of the first control command to decrease frame rate.

13. The system of claim **11**, wherein the video compression circuitry of the first wireless camera device is responsive to receipt of the first control command to decrease resolution.

14. A method of operation of a self-contained wireless camera device comprising:

receiving video signals from a camera;

selecting a compression protocol scheme;

providing compressed first video signals processed according to the selected compression protocol scheme;

transmitting the compressed first video signals over a shared radio channel;

generating control commands and transmitting the control commands to a base station device for control of transmission of compressed second video signals;

receiving compressed second video signals from the shared radio channel and providing decompressed video signals; and

selectively displaying images from the camera and images represented by the decompressed video signals.

15. The method of claim **14**, wherein the control commands include: a video replay command; a rewind command; and a fast forward command.

16. The method of claim **14**, wherein the control commands include a video quality command.

17. The method of claim **14**, wherein the control commands include a bandwidth control command.

18. A method of operation of a wireless camera system having a self-contained wireless camera device and a base station device, the method comprising, at the wireless camera device:

receiving video signals from a camera and providing compressed first video signals;

transmitting the compressed first video signals over a shared radio channel;

generating control commands and sending the control commands to the base station device;

receiving compressed second video signals at a radio receiver;

decompressing the compressed second video signals and providing decompressed second video signals; and

selectively displaying images from the camera and images represented by the decompressed second video signals

and at the base station device:

receiving the compressed first video signals from the radio channel;

receiving the control commands;

controlling retrieval of signals derived from the compressed first video signals in response to the control commands;

storing signals derived from the compressed first video signals; and

retransmitting the compressed first video signals as compressed second video signals.

19. The method of claim **18**, wherein the control commands include: a video replay command; a rewind command; and a fast forward command.

20. The method of claim **18**, further comprising delivering video signals derived from the compressed video signals from the camera as internet protocol packets at an output port.

21. A method of operation of a wireless camera system having a first wireless camera device and a base station device, comprising, at the first wireless camera device:

processing video signals from a camera to provide compressed first video signals;

transmitting the compressed first video signals;

receiving control commands;

modifying the processing of the video signals in response to a first control command received,

and at the base station device:

receiving a second control command, in response to a user selection input, seeking service for a second wireless camera device; and

transmitting to the first wireless camera device the first control command, thereby causing the first wireless camera device to adjust its operation to accommodate the second wireless camera device.

22. A method of claim **21**, wherein receiving includes receipt of the second control command from the second wireless camera device.

23. A method of claim **21**, wherein the first wireless camera device and the second wireless camera device share use of a common radio channel.

24. The method of claim **21**, wherein the first wireless camera device is responsive to receipt of the first control command to decrease bandwidth of the compressed first video signals.

25. The method of claim **21**, wherein the first wireless camera device is responsive to receipt of the first control command to decrease frame rate.

26. The method of claim **21**, wherein the first wireless camera device is responsive to receipt of the first control command to decrease resolution.

* * * * *

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Schulz et al.

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(45) **Date of Patent: Jun. 3, 2003**

(54) **SELF-CONTAINED CAMERA DEVICE AND METHOD FOR CAPTURING AND COMMUNICATING IMAGES VIA A MODEM**

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(73) Assignee: **Motorola Inc.**, Schaumburg, IL (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **09/103,408**

(22) Filed: **Jun. 24, 1998**

(51) **Int. Cl.**[7] **H04N 5/225**
(52) **U.S. Cl.** **348/373**; 348/231.9
(58) **Field of Search** 358/906; 348/231.7, 348/373, 14.02, 231.8, 231.9; H04N 5/225

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Assistant Examiner—Jason Whipkey
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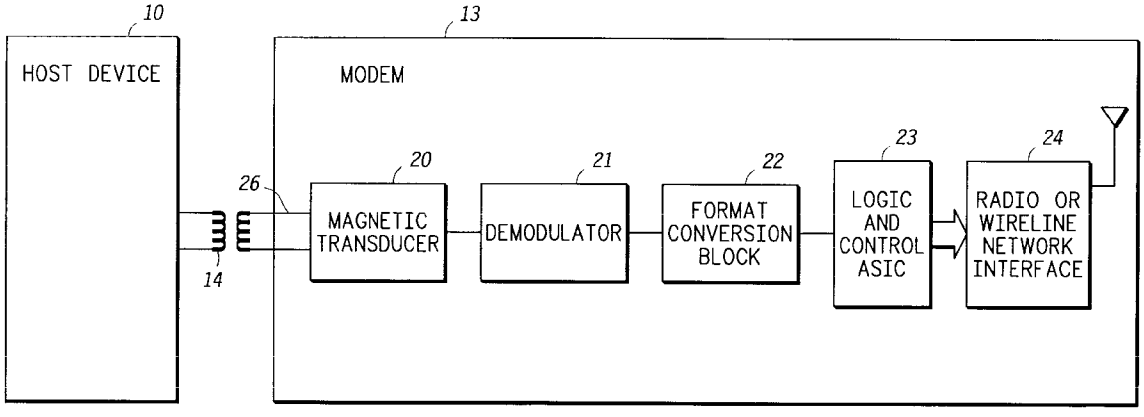
(57) **ABSTRACT**

A self-contained camera device **(10)** and method for capturing and communicating images via a modem **(13)**. The self-contained camera device **(10)** comprises an image capturing device **(15)** and a chassis **(11)** for receiving a storage module or a modem **(13)**. A removable modem **(13)** is mountable on the chassis **(11)** and couplable to the image capturing device **(15)**. The removable modem **(13)** is replaceable with the storage module.

14 Claims, 5 Drawing Sheets



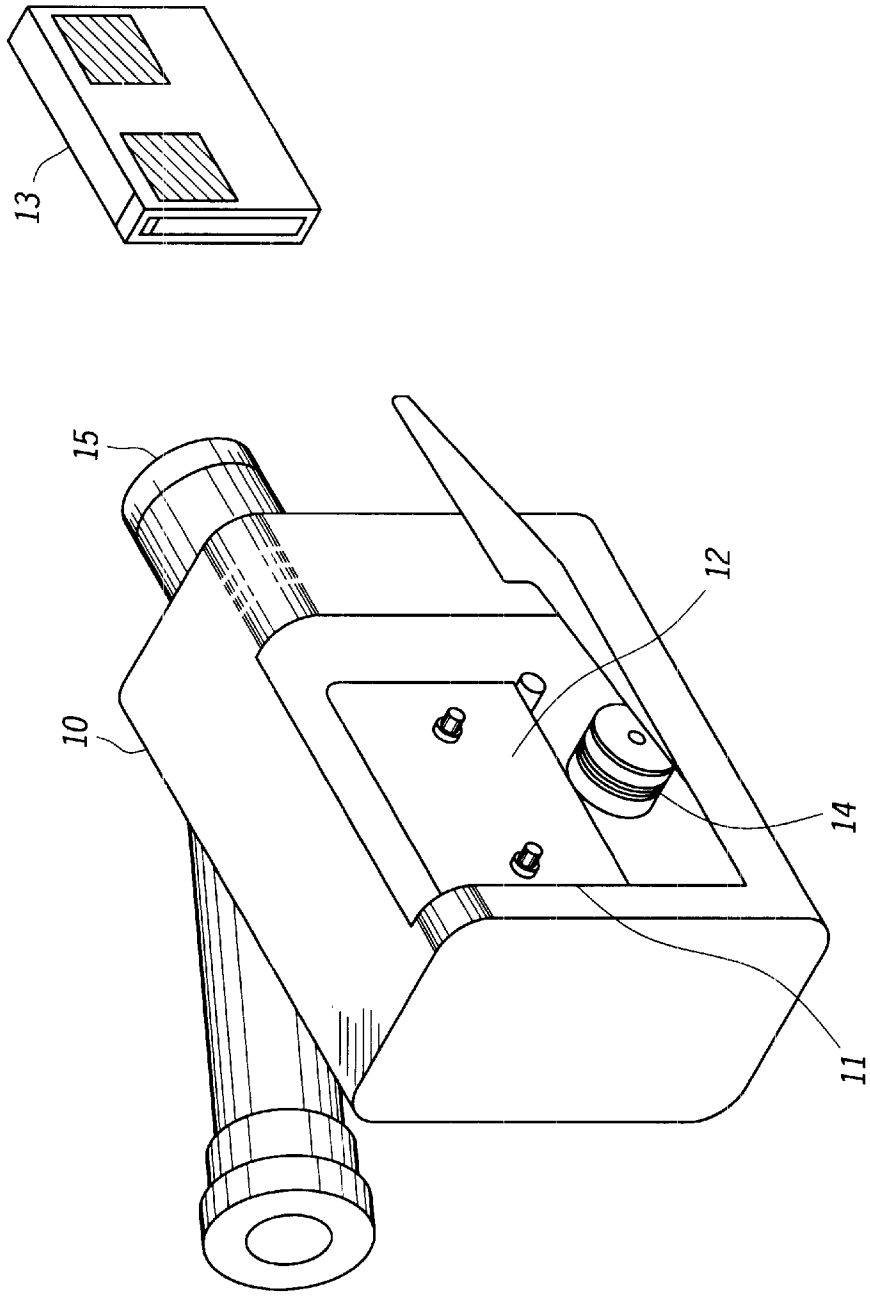


FIG. 1

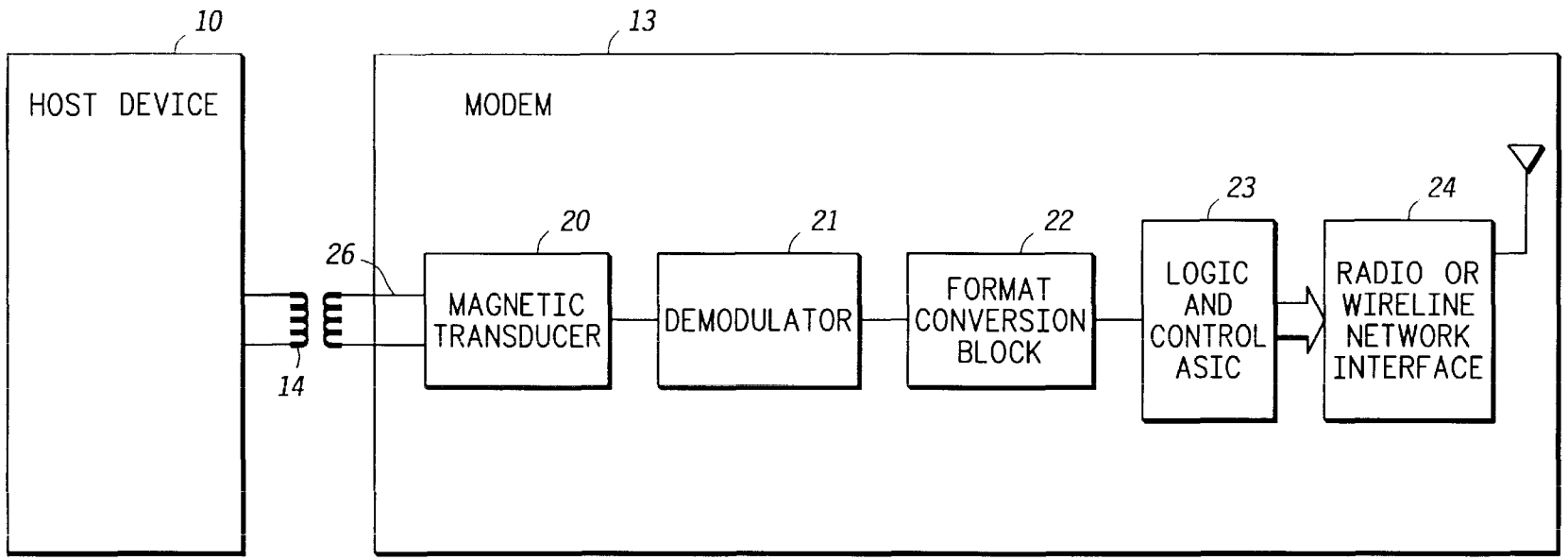

10
HOST DEVICE
13
MODEM
20
21
22
23
24
26
14
MAGNETIC TRANSDUCER
DEMODULATOR
FORMAT CONVERSION BLOCK
LOGIC AND CONTROL ASIC
RADIO OR WIRELINE NETWORK INTERFACE

FIG.2

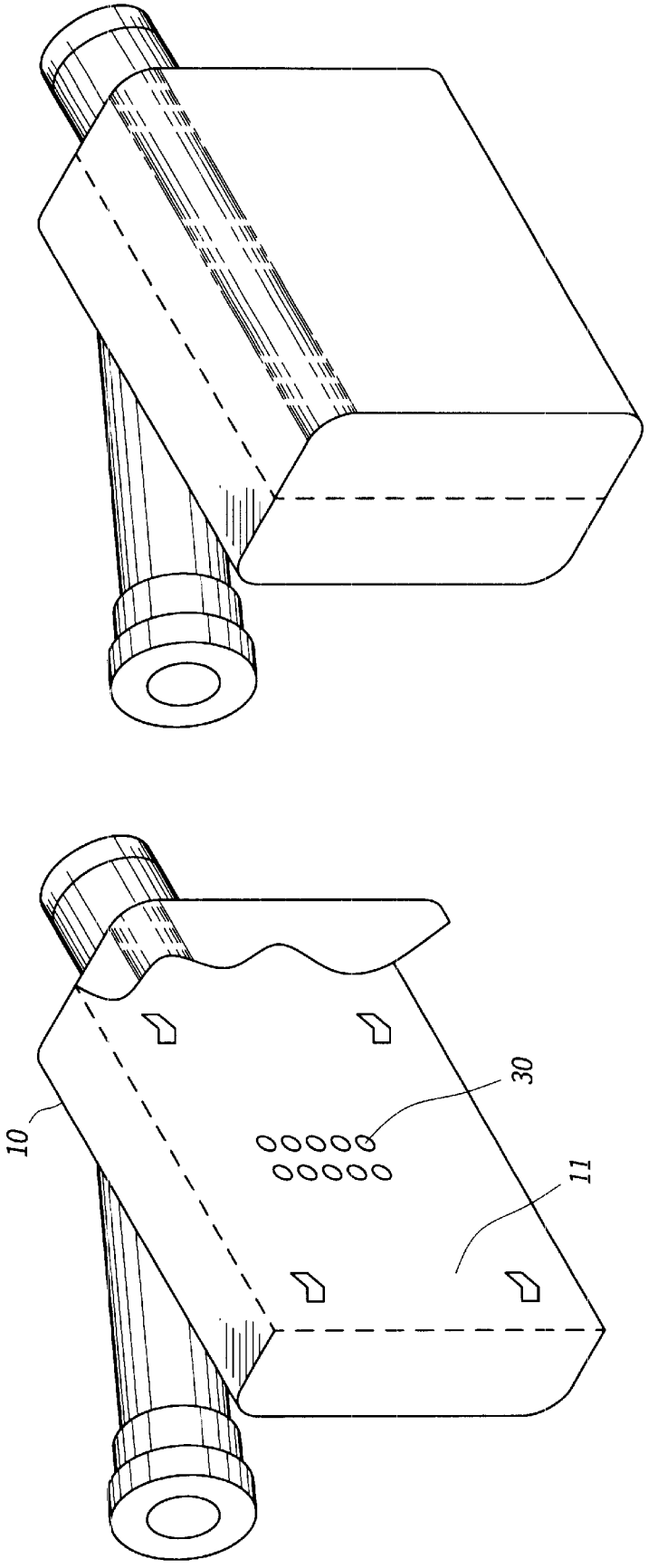


FIG.3

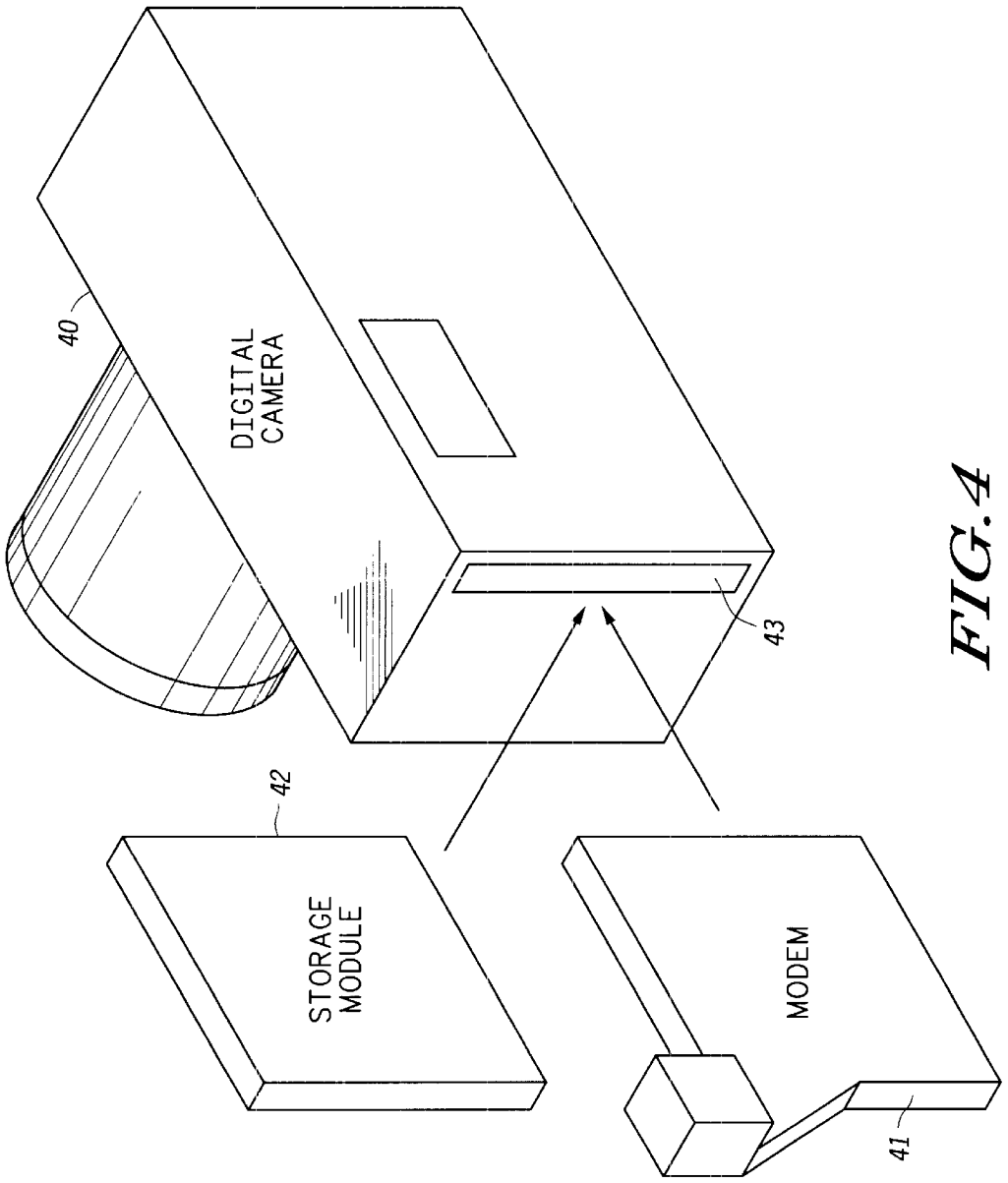


FIG. 4

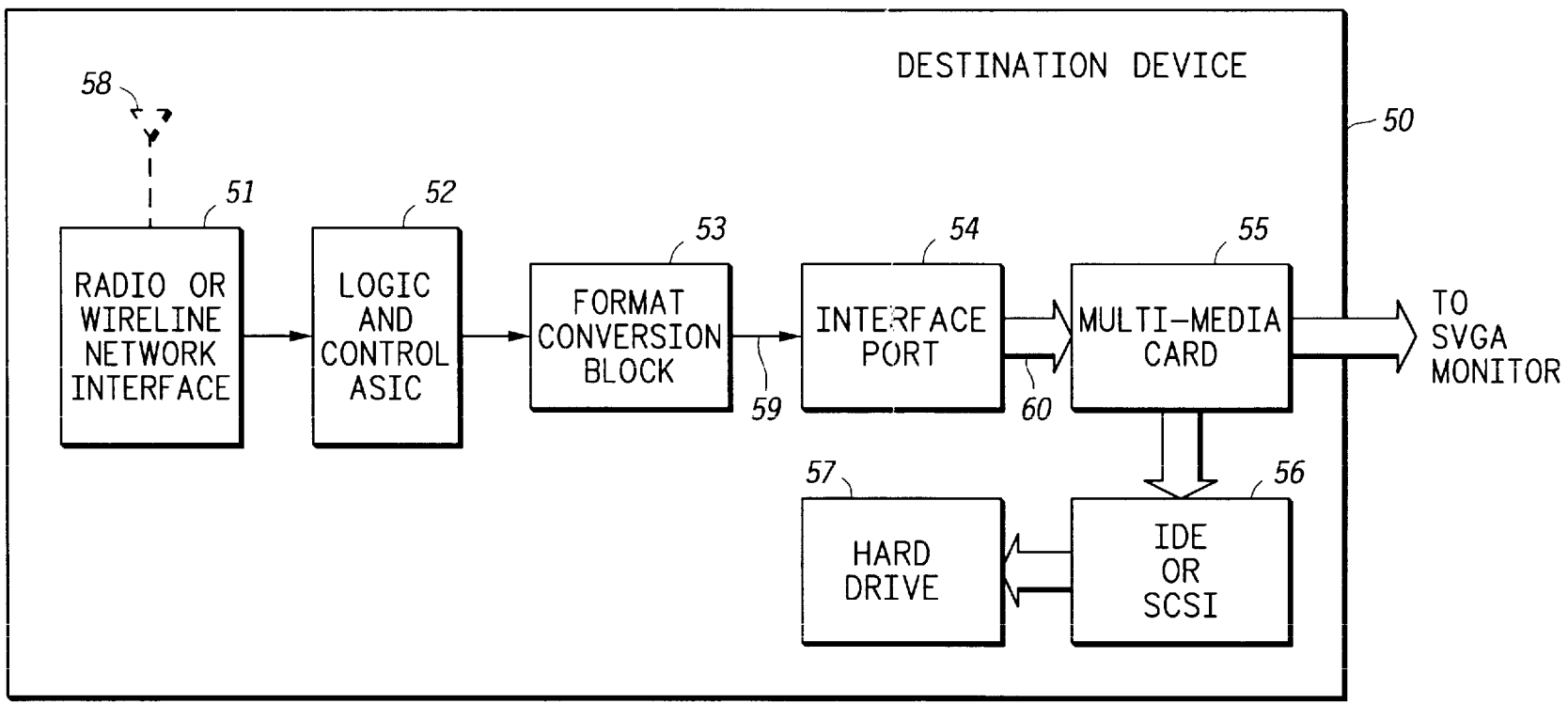

DESTINATION DEVICE
50
58
51
52
53
54
55
RADIO OR WIRELINE NETWORK INTERFACE
LOGIC AND CONTROL ASIC
FORMAT CONVERSION BLOCK
INTERFACE PORT
MULTI-MEDIA CARD
TO SVGA MONITOR
59
60
57
56
HARD DRIVE
IDE OR SCSI

FIG. 5

SELF-CONTAINED CAMERA DEVICE AND METHOD FOR CAPTURING AND COMMUNICATING IMAGES VIA A MODEM

FIELD OF THE INVENTION

The present invention relates to a self-contained camera device and method for capturing and communicating images via a modem.

BACKGROUND OF THE INVENTION

Currently, self-contained camera devices use external cabled connections to interconnect portable video cameras to radio frequency transmitters (typically analog video transmissions). These devices require dedicated redundant hardware to perform a dedicated function. A common application for such devices is for use in electronic news gathering activity and sports events.

Another application for a similar concept is in wireless in-home video distribution. In this application, a wireless video transmitter is cabled to a device such as a video cassette recorder (VCR), which enables the user to remotely view content without necessitating wiring a household. This application, however, requires a user to connect separate video and audio cables, as well as a power cable, to the host device resulting in a system that requires several pieces of equipment.

Thus, a need exists for a method and apparatus that provides an additional interface to the outside world without losing the functionality of a host device and provides for a way to achieve network connectivity for a consumer without the consumer having to purchase redundant hardware.

BRIEF DESCRIPTION OF THE DRAWINGS

A preferred embodiment of the present invention is now described, by way of example only, with reference to the accompanying drawings in which:

FIG. **1** is an isometric view of the preferred embodiment of the present invention;

FIG. **2** is a block diagram of a modem located on a host device according to the present invention;

FIG. **3** is an isometric view of a first alternative embodiment of the present invention;

FIG. **4** is an isometric view of a second alternative embodiment of the present invention; and

FIG. **5** is a block diagram of a destination device according to the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

The present invention allows for efficient re-use of any magnetically recordable media (e.g., consumer video or digital still camera equipment) by providing a means for additional external interfaces to networks, closed circuit televisions, monitoring, surveillance, commercial video market, etc. The present invention enables such an additional external interface to the outside world without losing the functionality of a host device (i.e., the magnetically recordable media).

The present invention provides for a generic interface that is applied to either digital or analog formats for both video and audio transmission. The present invention consists of the electronics necessary to interface the existing magnetic media electronics device with the outside world via a transport, wireless or wireline. The present invention allows the user of any magnetically recordable media to directly interface with the multimedia network by inserting a module or device in the form of a video or audio cassette and utilizing existing magnetic transducers to couple baseband modulation information to the transport.

Moreover, the present invention provides for a way to achieve network connectivity for the consumer without the consumer having to purchase redundant hardware. Thus, a person needs only one device with accessories to perform a multitude of functions. For example, a user of a camcorder is allowed to re-use the major components of the camera subsystem by removal of the cassette tape and the insertion of a modem.

The present invention utilizes a self-contained camera device which comprises an image capturing device and a chassis. The chassis receives a storage module (e.g., a tape cartridge) or a modem (wired or wireless). A removable modem is mountable on the chassis and couplable to the image capturing device. The removable modem is either a wireless radio frequency (RF) modem with a radio network interface and antenna or a wireline modem with a wireline network interface. Coupling the removable modem to the chassis allows the image capturing device to transmit images via the radio or wireline network interface. The removable modem is replaceable with a storage module. Preferably, the removable modem has an identical form factor as the storage module, including an identical input-output interface.

The removable modem utilizes existing hardware on the host device and provides an additional interface to the outside world in place of the functionality of the cassette tape transport mechanism. The removable modem takes on the mechanical configuration of a video, audio, digital audio tape (DAT) or similar cassette, and uses the existing consumer electronic tape drive as a docking station for a peripheral, e.g., 5 GHz wireless radio, infra-red or wireline modem with various interfaces, e.g., 10 base T or 1394. The installation of such a peripheral can be made connectorless since it utilizes the existing magnetic record heads of the host device.

As shown in FIG. **1**, in the preferred embodiment of the present invention, the self-contained camera device **10** is a camcorder (i.e., host device) and the chassis **11** has a cavity **12** for receiving the storage module (not shown) or the removable modem **13**. The cavity **12** is also adapted to receive a magnetic tape.

The cavity **12** includes a magnetic head **14** coupled to the image capturing device **15** of the host device **10**. The magnetic head **14** couples a video signal, which originates from the host device **10**, by picking up magnetic signals and duplicating the magnetic signals on the modem **13**.

As shown in FIG. **2**, the modem **13** consists of several components: a magnetic transducer **20**, a demodulator **21**, a format conversion block **22**, a logic and control application specific integrated circuit (ASIC) **23**, a radio or wireline network interface **24** (and an antenna **25**, if utilizing the radio network interface). The magnetic transducer **20** is selectively and/or removably couplable to a magnetic head **14** within the cavity **12**. A coil **26** is placed in the magnetic transducer **20** which picks up the magnetic signals generated by the magnetic head **14**. The magnetic transducer **20** establishes connectivity with the host device **10** when the magnetic transducer **20** comes in contact with or comes within close proximity to the magnetic head **14** of the host device **10**. After the magnetic transducer **20** picks up the magnetic signals from the magnetic head **14** of the host device **10**, the magnetic signals need to be demodulated.

The demodulator **21** is coupled to the magnetic transducer **20**. The demodulator **21** demodulates the magnetic signals picked up by the magnetic transducer **20** and converts them into baseband video signals. The demodulator **21** provides the baseband video signals to the format conversion block **22**.

The format conversion block **22** is coupled to the demodulator **21**. The format conversion block **22** is specific to the type of host electronic device **10** that the modem **13**, or any other magnetic media housing, is plugged/inserted into. The format conversion block **22** presents the demodulated video baseband information in a baseband format ready for digitization by the video encoder/compression engine which is part of a very large scale integration (VLSI) ASIC.

The logic and control ASIC **23** is coupled to the format conversion block **22** and receives the baseband format from the format conversion block **22**. After format conversion, the digital video and audio are packetized by the logic and control ASIC **23** and presented to the radio or wireline network interface **24**, i.e., 5 GHz radio. The logic and control ASIC **23** controls the rate of modulation to the radio or wireline network interface **24**. For example, the logic and control ASIC **23** instructs the radio or wireline network interface **24** when to transmit and receive signals, queries the radio or wireline network interface **24** whether it received a packet, whether the packet contained errors, whether there was a collision, or whether the logic and control ASIC **23** needs to request that the packet is re-sent. Thus, the logic and control ASIC **23** helps manage the radio or wireline network interface **24** and data framing.

If transferring files over the Internet, an internet protocol (IP), a host device IP address and a destination device IP address are embedded or downloaded in the logic and control ASIC **23**. Embedding or downloading such information enables the logic and control ASIC **23** to know how to format the files and where to send the information over the Internet.

The radio or wireline network interface **24** is coupled to the logic and control ASIC **23**. The radio or wireline network interface **24** is either a point-to-point stand alone system or part of a multimedia network. When the radio network interface **24** is utilized, the radio network interface **24** transmits the digital signal to a destination device via the antenna **25**. When a wireline network interface **24** is utilized, the wireline network interface **24** transmits the digital signal to the destination device via an infra-red or wireline interface (e.g., 10 base T).

FIG. **3** illustrates an isometric view of a first alternative embodiment of the present invention. As shown, the chassis **11** of the host device **10** is adapted to receive a storage module (e.g., a semiconductor memory), a modem, or any other network interface. The chassis **11** comprises a set of electric contacts **30** for selectively connecting to the semiconductor memory, the modem or any other network interface.

As shown in FIG. **4**, a second alternative embodiment of the present invention is applicable as a radio or wireline network interface for digital still cameras **40**. The components of the modem **41** in the second alternative embodiment are the same as in the preferred embodiment. The modem **41** is embedded in a module that also contains a mini flash storage interface. The modem **41** takes the place of the functionality of the storage module **42** and is inserted into the cavity **43** of the digital still camera **40**. Embedding the modem **41** in a module that also contains a mini flash storage

interface allows the present invention to take advantage of the mini flash storage interface standard which is available across numerous vendor platforms.

A third alternative embodiment (not shown) replaces the entire tape drive transport module with a modem. All video cameras use a multi-lead interface from the tape drive transport module back to the electronics of the self-contained camera. The present invention allows the tape drive transport interface to interface with the modem. The user can remove the tape drive transport module from the host device and insert a modem in its place. The modem has the same size, shape and form factor as the tape drive transport module and connects itself to the self-contained camera device via the multi-lead interface. Thus, the user can interchange the tape drive transport module with the modem depending on his need.

At this point, capturing and communicating images at the self-contained camera device has been described. The remaining description focuses on receiving the images transmitted from the self-contained camera device at a destination device (e.g., a personal computer).

As shown in FIG. **5**, the destination device **50** has common circuitry as the modem **13** located on the host device **10**. Embedded in or mountable on the destination device **50** are the following components: a radio or wireline network interface **51**, a logic and control ASIC **52**, a format conversion block **53**, an interface port (e.g., a network interface card) **54**, a multimedia card **55**, an integrated drive electronics (IDE) or small computer system interface (SCSI) **56**, and a hard drive **57**. The radio or wireline network **51** is in communication with the modem **13** via an antenna **58** or a wireline. The logic and control ASIC **52** is coupled to the radio or wireline network interface **51**. The format conversion block **53** is coupled to the logic and control ASIC **52**. The interface port **54** is coupled to the format conversion block **53** via a 1394, a 10 base T (e.g., Ethernet) or a high speed serial bus **59**. The multimedia card **55** is coupled to the interface port **54** via a system bus, e.g., protocol control information (PCI) **60**. The IDE or SCSI **56** and a super video graphics array (SVGA) monitor (not shown) are coupled to the multimedia card **55**. The hard drive **57** is coupled to the IDE or SCSI **56**.

In operation, using a radio network interface **51** and an antenna **58**, the RF signals are picked up by the antenna **58** on the destination device **50** and are fed to a radio (e.g., 5 GHz radio). The radio network interface **51** down-converts the RF signals into baseband signals. The baseband signals are then fed into the logic and control ASIC **52**. The logic and control ASIC **52** is able to read the data that comes over the baseband signals and strips out the data from the baseband signals to create raw data which is fed into the format conversion block **53**. The format conversion block **53** converts the raw data into one of several standard data formats (e.g., 10 base T, 1394, high speed serial, etc.). The data flows from the format conversion block **53** to an interface port (e.g., network interface card) on the destination device **50**. The data is then ported into a system bus **60** and into a multimedia card **55** by using the appropriate software application. The data is now able to be viewed on a computer monitor (e.g., a SVGA monitor) or stored on the system hard drive **57**, or other media storage device (e.g., floppy disk, tape drive, etc.), that enables the user to view, manipulate and store the video data. It is important to note that the wireline network interface essentially operates in the same manner as the radio network interface. The wireline network interface, however, has a wired or infra-red connection to the destination device as opposed to a radio.

While the invention has been described in conjunction with a specific embodiment thereof, additional advantages and modifications will readily occur to those skilled in the art. The invention, in its broader aspects, is therefore not limited to the specific details, representative apparatus and illustrative examples shown and described. For example, the present invention is also applicable to other forms of consumer imaging devices. The modem disclosed herein could take the form of a data storage card, personal computer memory card international association (PCMCIA) card or disk drive. The electrical and mechanical interfaces could be configured to be compatible with any of these standards. Various alterations, modifications and variations will be apparent to those skilled in the art in light of the foregoing description. Thus, it should be understood that the invention is not limited by the foregoing description, but embraces all such alterations, modifications and variations in accordance with the spirit and scope of the appended claims.

We claim:

1. A self-contained camera device for capturing and communicating images via a modem comprising:

an image capturing device;

a chassis for receiving a storage module or a modem; and

a removable modem, mountable on the chassis and couplable to the image capturing device, wherein the modem is replaceable with the storage module; and

wherein the self-contained camera device is a camcorder, which further comprises a removable tape drive transport module.

2. The self-contained camera device according to claim **1** wherein the wireless communication device is a wireless radio frequency modem.

3. The self-contained camera device according to claim **1** wherein the modem is a wireline modem.

4. A self-contained camera device for capturing and communicating images via a modem comprising:

an image capturing device;

a chassis for receiving a storage module or a modem; and

a removable modem, mountable on the chassis and couplable to the image capturing device, wherein the modem is replaceable with the storage module; and

wherein the chassis has a cavity for receiving the storage module or the modem, where the cavity is adapted to receive a magnetic tape.

5. The self-contained camera device according to claim **4** wherein the cavity includes a magnetic head coupled to the image capturing device and the removable modem comprises a magnetic transducer removably coupled to the magnetic head.

6. A self-contained camera device for capturing and communicating images via a modem comprising:

an image capturing device;

a chassis for receiving a storage module or a modem; and

a removable modem, mountable on the chassis and couplable to the image capturing device, wherein the modem is replaceable with the storage module;

wherein the chassis has a cavity for receiving the storage module or the modem; and

wherein the removable modem comprises

a magnetic transducer selectively couplable with a magnetic head within the cavity,

a demodulator coupled to the magnetic transducer,

a format conversion block coupled to the demodulator,

a logic and control application specific integrated circuit coupled to the format conversion block, and

a network interface coupled to the logic and control application specific integrated circuit.

7. The self-contained camera device according to claim **6** wherein the network interface is a radio network interface, and further comprising an antenna coupled to the radio network interface.

8. The self-contained camera device according to claim **6** wherein the network interface is a wireline network interface.

9. A housing for capturing and communicating images on a self-contained camera device via a modem comprising:

a magnetic transducer for picking up a magnetic signal generated by a magnetic head of a host device;

a demodulator for demodulating the magnetic signal picked up by the magnetic transducer to produce a video baseband signal;

a format conversion block for formatting the video baseband signal;

a logic and control application specific integrated circuit for packetizing the video baseband signal; and

a network interface for communicating the video baseband signal to a destination device.

10. The housing according to claim **9** wherein the housing has a same shape and size as a magnetic cassette tape.

11. The housing according to claim **9** wherein the magnetic transducer comes in contact with the magnetic head of the host device to establish connectivity.

12. The housing according to claim **9** wherein the magnetic transducer is within close proximity to the magnetic head of the host device to establish connectivity.

13. A self-contained camera kit of parts comprising:

a housing having image capturing capabilities and a chassis;

a removable tape drive transport module; and

a removable modem, wherein the removable tape drive transport module and the removable modem are alternatively mountable on the chassis.

14. A method of capturing and communicating images on a self-contained camera device via a modem comprising:

entering a record mode;

activating a magnetic head of a host device;

utilizing a magnetic transducer to pick up a magnetic signal generated by the magnetic head of the host device;

demodulating the magnetic signal picked up by the magnetic transducer to produce a video baseband signal;

formatting and packetizing the video baseband signal; and

communicating the video baseband signal through a network interface.

* * * * *